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JOURNAL

OF THE

STRAITS BRANCH

OF THE

ROYAL ASIATIC SOCIETY.

JUNE, 1883.

PUBLISHED HALF-YEARLY.

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ORNITHOLOGICAL NOTES

MADE IN THE

STRAITS SETTLEMENTS

AND IN THE

WESTERN STATES OF THE MALAY PENINSULA.

(First published in "The Ibis.")

(Continued from Journal No. 9, p. 140.)

Arachnothera longirostra (Lath.). The Small Spider-hunter.

My only specimen was shot in the neighbourhood of Malacca. This bird is very like, if not identical with, Blyth's *A. pusilla.*

Arachnothera chrysogenys (Temm.).

My specimens are from Malacca and Johor.

Arachnothera modesta (Eyt.). The Large Spider-hunter.

Probably fairly plentiful, as I bought several skins from the Malacca collectors.

Once, during May, I myself shot one near Enggar, a small village on the left bank of the Pêrak river, and distant about 140 miles from its mouth. I was returning to Kuâla Kangsa, after a few days' trip up-stream, and had passed a most uncomfortable night, lying in the bottom of a very narrow and extremely leaky canoe, drawn up on a sand bank in mid-stream; and, to quote from my note-book, "when I awoke, a thick white mist hung over the river, saturating everything, like rain; but as day broke this gradually cleared off; so, wading ashore, I struck into the jungle along one of the many pig-tracks leading inland. Before I got far from the river, I noticed a small plainly-coloured bird clinging to a pendent creeper, fluttering its wings and uttering a shrill piercing cry, and, on shooting it, found I had killed a specimen of *A. modesta.* On dissection it proved to be a female. Length 7½ inches, bill along ridge 1½; irides brown; legs and bill flesh-colour, upper mandible of latter dusky; upper parts, wings and tail yellowish green; feathers of the last dark-tipped, and having a white spot on one web; feathers of the crown scaly and dark-centred; underparts pale green. It had been feeding on beetles."

ÆTHOPYGA SIPARAJA (Raffl.). The Scarlet Honey-sucker.

Though I *saw* this brilliantly-coloured bird on two occasions, once on Pulau Batam, and once on Pulau Ubin, islands near Singapore, I am only able to record as actually obtained a single specimen, a male, shot by a brother-officer among some cocoa-nut trees near Bukit Timah, on 2nd of August, 1879. There were a pair of them picking out insects from among the cocoa-nuts; those I saw on the islands were similarly employed.

CHALCOSTETHA INSIGNIS (Jard.).

Swarms wherever there are cocoa-nut-plantations, particularly if they be on the sea-shore. During September, 1879, I saw literally hundreds of these Honey-suckers among the cocoa-nut trees at Tanjong Katong, Singapore. I also, at different times, got many specimens in Pulau Batam, Pulau Ubin, Province Wellesley, and Malacca.

In Singapore, a favourite resort of mine was a plantation near Tanglin, where I passed many an afternoon among these little birds, which were so plentiful that I had every opportunity of observing them and their ways, as flitting from tree to tree, they dodged about among the clusters of cocoa-nuts, at one moment hanging head downwards, searching among the leaves and stalks for flies, spiders, and other small game, the next, hovering with quickly fluttering wings to pick out of its hiding-place some insect not otherwise to be got at. The male has a shrill piping note, and is far the most beautiful of the sexes, the female being dull-coloured and without the rich metallic markings. During August, I noticed that the young were in great numbers, and saw some being fed by the parent birds; but even without that proof of their youth, they can be distinguished by their dingy plumage, and by the males having but faint signs of the metallic colouring of the mature bird. Their irides are smoky brown.

Of course, at a little distance, it is impossible to tell the immature birds from mature females.

In my note-book I find:—

"Singapore, 23rd Sept. 1879. With K—— and R—— I went by steam-launch to Tanjong Katong, where we spent the morning among the cocoa-nut trees collecting Honey-suckers. The more common kinds, *C. insignis*, *A. malaccensis*, and *C. pectoralis*, were plentiful enough; but nowhere could I see one of the bright scarlet species, *Æ. siparaja*, which K—— shot near Bukit Timah last month; apparently it is rare.

"I shot several females of *C. insignis*, veryunlike their handsome mates; they were $4\frac{3}{4}$ inches in length, bill at front $7\frac{1}{10}$; head and upper parts dull grey, tinged on the back and wings with yellowish green; tail deep steel-blue, tipped with white; abdomen pale yellow."

Again:—

"Changi, Singapore, 8th Jan., 1877. To-day I shot a most beautiful Honey-sucker, *C. insignis*; three of them, apparently a male and two females, were sitting on a dead bough, spreading out their wings, preening their feathers, and most thoroughly enjoying the morning sun. I shot the male; but he fell into the thick jungle, and, being such a tiny bird, it was a long time before I could find him."

CINNYRIS HASSELTI.

Certainly rare, as I never saw it in any of the Malacca or Singapore collections, and only once got it myself, viz., in January, 1877, near Kuâla Kangsa, Pêrak. Mine was a male, a perfect marvel of rich metallic colouring.

Dr. STOLICZKA mentions having obtained this Honey-sucker in Province Wellesley and Penang.

I know Penang Hill to be a particularly good locality for collecting Cinnyridæ, and expect that this species is more plentiful there than anywhere else in the Straits, though, having stayed but a few days on the island, I cannot speak from personal experience.

ANTHREPTES MALACCENSIS (Scop.).

Common in the gardens of Singapore; also, like the other Honey-suckers, partial to cocoa-nut groves, where insects are abundant. At Singapore, it was very plentiful in the neighbourhood of the barracks; but I also got specimens in all the western States of the peninsula.

They flit about the trees, searching among the clusters of nuts for insects.

ANTHREPTES SIMPLEX.

My specimens are all from Malacca.

ANTHREPTES HYPOGRAMMICA (Müll.).

All mine are from Malacca.

CHALCOPARIA SINGALENSIS (Gm.).

Very common in Malacca collections, but personally I shot very few specimens.

CINNYRIS PECTORALIS (Horsf.)

Fairly plentiful throughout the Straits. I frequently shot specimens on the island of Singapore, also got several from Malacca. The following notes are from my book:—

"Tanglin, Singapore, 18th April, 1879. Just in front and within ten yards of the verandah running round our quarters, a pair of Honey-suckers have built their nest, a long bottle-shaped structure of moss, cobweb, and other soft materials, suspended from the end of a branch quite thirty feet from the ground. The birds are continually hunting under the eaves of our bungalow, picking insects out of the thatch, and returning with them to the nest; so I suppose it contains young. This morning I timed one of the parent birds make three visits to the nest, with its bill full of insects, in less than a minute. They are *Cinnyris pectoralis,* Horsf. I often have excellent chances of examining them, as they frequently flutter about the verandah within a couple of paces of where I stand. I do not like to molest them while rearing their young, but after the nestlings have flown will cut down the nest."

Again, I find:—

"Singapore, 26th April, 1879. This morning I stood close to, and watched for a long time, a young Honey-sucker which was flitting about a shrub in front of our Orderly-room. It was scarcely able to fly, certainly not more than a few feet at a time; its upper parts were dull brown, underparts yellow, no metallic markings. I approached within arm's reach of it, when the parent bird got very excited and fluttered round, piping shrilly; it was a *Cinnyris pectoralis*, the same as those which have built in front of our Mess."

DICÆUM CRUENTATUM (Linn.).

Fairly plentiful. I obtained it in Singapore, Malacca, and Pêrak; and I see JERDON says it is abundant in Assam, to the north of the peninsula. On 13th June, 1877, I shot a pair which were flitting about a durian tree close to my hut at Kuâla Kangsa.

DICÆUM CHRYSORRHŒUM (Temm.).

I shot one of these tiny Flower-peckers among the cocoa-nut trees bordering the Bukit Timah Road, Singapore, 10th August, 1879.

It is plentiful in the collections at Malacca, as are most of the small brightly coloured Honey-suckers and Flower-peckers, on account of their selling well; but now that the fashion of their being worn in ladies' hats has gone or is going out, it is to be hoped that so many will not be killed as hitherto.

PRIONOCHILUS PERCUSSUS (Temm.).

All my specimens are from Malacca.

PRIONOCHILUS MACULATUS (Temm.).

As with the last, all from Malacca.

LANIUS BINTET (Horsf). The *L. schach* of Linnæus.

I once saw this Shrike in Singapore; further east it is common.

I shot a great many among the Kowloon Hills, on the mainland near Hongkong, where it was exceedingly plentiful, its favourite post being the topmost spray of one of the stunted firs which are sparsely scattered over the hill-sides; it was a particularly noticeable bird on account of its harsh cry.

LANIUS CRISTATUS (Linn.).

I occasionally came across this Shrike in Singapore. A specimen I got at Malacca is slightly under 8 inches in length.

LALAGE TERAT (Bodd.).

This Black-and-white Bulbul, as we used to call it, is common in

Pêrak and Singapore, breeding in both places.

In my notes I wrote as follows:—

"Singapore, 19th July, 1879. To-day I shot one of the black-and-white-plumaged birds, *L. terat*, which I so frequently saw on the open ground bordering the river near Kuâla Kangsa.

"Singapore, 1st Sept., 1879. The young of the pied *Lalage terat* are now about our garden in front of the Mess, and make a most strange plaintive noise, like a child crying; in appearance they resemble the parent birds, but are not nearly so distinctly marked, and are considerably mottled."

TEPHRODORNIS GULARIS (Raffl.).

I got a specimen of this Wood-Shrike from a Portuguese collector at Malacca.

GRAUCALUS SUMATRENSIS (Müll.).

I saw some specimens of this bird obtained in Johor; personally I only once met with it in the jungle.

During August, 1877, I was one of the party which accompanied H. H. The Maharâja of Johor up the Moar river to a meeting of the Chiefs at Segamat. On the 8th of August, after travelling up-stream all through the day, we stopped about sunset at Bukit Kopong, a village on the left bank, for a bath and some dinner, before which I wandered into the jungle for an hour with my gun, and got several birds then new to me, among others a grey Crow-like bird, *G. sumatrensis*, which was sitting on a tree close to some Malays' huts.

PERICROCOTUS FLAMMIFER (Hume.).

I have a pair of these beautiful Minivets, shot on 19th August, 1879, on Gunong Pulai, Johor, by Mr. DAVISON's collector.

DISSEMURUS PLATURUS (Vieill.).

This Drongo Shrike, or King Crow, as it is commonly called, is plentiful in the peninsula; and I also got several on the islands of Singapore, Batam, and Ubin; it is found in considerable numbers on Penang hill.

In the undisturbed tracts of jungle towards the north of Pêrak, I frequently came across this racket-tailed Drongo; but it was some time before I managed to get a perfect specimen, as, though I shot seven or eight, in every case in falling through the trees the two long tail-feathers caught in the branches and were pulled out; but at last, on the outskirts of Kampong Sayong, I came on one in the open, and brought it down as, with a peculiar jerky flight, it made for the jungle.

Later on I found out a piece of ground near Kuâla Kangsa, covered by scrub, and surrounded with high jungle, where several of these birds were to be seen almost every evening, particularly after rain, hawking in mid-air for insects.

The above-mentioned specimen, shot on 8th April, 1879, measured 19 inches in length; but the outer tail-feathers on each side projected 7 inches beyond the others, was entirely without web, except on its terminal two inches, where the web is mostly on the inner side and has a peculiar twist; the bird, when flying, looked as if it had behind it two long pliant wires with a black bob at the end of each.

The length of the outer tail-feathers varies in different specimens; in one of mine they project 9 inches beyond the rest of the tail, in another only 6 inches.

They breed throughout Western Malaya. A young bird which I shot on Bukit Timah, Singapore, on 19th July, had the feathers of the under surface of the wings, also the under tail-coverts, white-tipped; and the long outer tail-feathers were only just beginning to sprout; beak from gape 1½ inch, tarsus ⅘; irides red-brown.

With reference to its breeding in Pêrak my notes are:—

"Kuâla Kangsa, 18th June, 1877. This evening, while stalking pig in the jungle near Kôta Lâma, I disturbed two young Drongos, *D. platurus*. They could scarcely fly; and I very nearly caught them, much to the annoyance of the old birds, which flew close round me, screaming loudly, in a state of the greatest excitement. The young were fully fledged, but wanted the long tail-feathers."

Muscifeta affinis (Hay.). The Burmese Paradise Fly-catcher.

Rare; at least I found it so, though there were generally a few in the Malacca collections.

Early in June, 1877, in the neighbourhood of Kuâla Kangsa, I came on one of these Fly-catchers, and followed it for a long distance without being able to get a shot. It was most provoking, not flying far at each flight, but, as soon as I got within eighty or ninety yards, taking to wing and keeping carefully out of range, and finally disappearing in thick jungle.

However, a few days later, on 18th June, I was more fortunate, getting an adult male in the beautiful white plumage. It was among the trees bordering the road from Kuâla Kangsa to Bukit Gantang. Length to end of ordinary tail 8¼ inches; but beyond this the two central feathers projected 6 inches, the total length of the bird being 14½ inches; beak and eyelids pale lead-blue; irides dark brown; head, crest, neck and throat glossy blue-black; general plumage white; inner webs of primaries, shafts of secondaries, shafts and edges of tail-feathers black.

Another, which I got at Malacca, was 7½ inches long to the end of the ordinary tail, total length 13½ inches; head and crest glossy blue-black; nape and the underparts ashy grey; dark and glossy on the throat, but becoming whitish on the abdomen; tail and upper parts rich chestnut; inner webs of wing-quills dusky. According to JERDON, this plumage is characteristic of the immature male.

LEUCOCERCA JAVANICA (Sparrm.).

I found this Fly-catcher very common in all the gardens round Tanglin, Singapore.

PITTA MOLUCCENSIS (Müll.).

This beautiful Ground-Thrush cannot be very rare, as, while stationed at Kuâla Kangsa, I had a great many brought to me by the natives, who had caught them in snares. I kept some in my aviary for several months; and they did well, feeding on rice, but never became at all tame.

One morning in March, while Snipe-shooting on the bushy ground on the bank of the Pêrak river, just opposite Kuâla Kangsa, I caught a glimpse of a brilliant blue-plumaged bird as it flew into some thick bushes, fired, and found I had killed a specimen of this *Pitta*.

I also got specimens in Malacca and Lârut.

PITTA GRANATINA.

It is hard to say which is the most beautiful of the Ground-Thrushes; all are so handsome; but this will compare favourably with any of them.

My specimens are all from Malacca and Moar districts.

Pitta cucullata (Hartl.).

During January, 1877, I obtained one of these Ground-Thrushes, an adult, near Kuâla Kangsa, Pêrak.

Pitta boschi (Müll.).

During January, 1877, I got a pair of these beautiful birds near Kuâla Kangsa, Pêrak.

Mixornis gularis (Raffl.).

"Singapore, 5th Aug., 1879. Shot a few small birds among the trees bordering the Bukit Timah Road, the first being a specimen of *M. Gularis*, one of a party of eight or nine which were flitting along a hedge-row."

I shot another close to our Mess at Tanglin.

Turdus ruficollis (Pallas.).

Mr. Davison showed me a specimen of this Thrush which had been shot at Singapore. Personally I did not meet with it in Malaya, but shot one in North China, where, I believe, it is by no means a rare bird.

The following note relates to this bird:—

"3rd Dec., 1879, near Soo-chow, two days' journey from Shanghae. To-day, while Pheasant-shooting, I put up a Thursh of a kind I have not met with before, so shot it. I think it is undoubtedly a female of *Planesticus ruficollis*, the Red-tailed Thrush of Northern Asia. It was by itself. Length 9 inches; irides dark brown; bill yellow at base and gape, dusky at tip; legs brown; upper parts dull brown, darkest on the tail and wings; outer edges of wing-coverts whitish; inner webs of tail-feathers (except two central ones), beneath the wings, the chin, throat, breast, and flanks rufous; throat and breast covered with dusky spots; under tail-coverts rufous, with white margins; streak over eye pale rufous; ear-coverts and the head dull brown."

Cyanoderma erythropterum (Blyth.).

During May, 1877, near Kuâla Kangsa, Pêrak, I shot two small birds which were creeping about on the ground in a patch of thick jungle. At the time I did not know what to make of them, but afterwards identified them as of this species.

Top of head chestnut; irides red-brown; white superciliary streak; bare skin round the eyes pale yellowish green; upper parts dull brown; underparts white, with brown streaks on the breast; legs flesh-colour; basal half of the lower mandible yellow.

MALACOPTERUM MAGNUM (Eyt.).

A specimen from Gunong Pulai, Johor, shot 25th August, 1879, a male, measured about 6 inches in length. Forehead chestnut; nape black; upper parts dull red-brown; beneath glossy white; dusky on the breast.

DRYMOCATAPHUS NIGRICAPITATUS (Eyt.).

Gunong Pulai, Johor, 9th August, 1879. A male; length 5½ inches, tarsus $1\frac{1}{12}$; crown and nape black; most of plumage red-brown; underparts bright rufous; throat white; cheeks ashy.

OTOCOMPSA ANALIS (Horsf.).

About the most common bird in the Straits, also very plentifully distributed throughout the Native States; in the Singapore gardens, it simply swarms, and is easily known by the bright yellow feathers beneath its tail. It breeds during April and May.

At Tanglin, Singapore, I found a nest in a road-side hedge; it was carefully concealed, but within a few feet of passing carriages. The eggs were white, blotched (but principally at the larger end) with red-brown.

One I shot at Singapore, on 25th December, 1877, was 7½ inches in length. Irides dark brown. A female which I shot at Kuâla Kangsa, Pêrak, on 23rd March, 1877, was rather smaller than the above.

They feed on insects, and have a rather pleasing song.

IXUS PLUMOSUS (Blyth.).

Late in September, 1879, I shot a pair of these soft-plumaged Bulbuls in the low jungle bordering the sea-shore on Pulau Batam, an island near Singapore.

MICROTARSUS MELANOLEUCUS (Eyt.).

Malacca. Description from the skin:—Length 7 inches. Entirely black, except the wing-coverts, which are creamy white.

RACHYPODIUS MELANOCEPHALUS (Gm.). The Fan-tailed Bulbul.

I have specimens of this Bulbul from Malacca, and also shot several in Pêrak.

In my note-book is:—

"Kuâla Kangsa, 5th May, 1877............While stopping to get a cocoa-nut at a Malay's hut, some three or four miles from camp, I shot a small Bulbul which was flitting about near the top of a high tree.

OTOCOMPSA EMERIA (Linn.).

I heard of one of these Bulbuls being shot in the Straits, but myself never even saw it there. In South China it is exceedingly plentiful:—

"Hongkong, 16th May, 1878. This morning I caught three young Bulbuls on the grass plot behind my quarters. They could scarcely fly, evidently having but lately left their nest. Putting them in a cage outside my window, the old birds soon found them out and brought them food, but made a great fuss if I went near. All day long they kept close to their young, and often settled within a few feet of me; so I took down an exact description of them. Irides deep crimson; bill black; head, crest, moustache-streak, and band down side of neck jet-black; cheeks white; upper parts brown; throat and underparts dull white; under tail-coverts bright crimson. They are common about the gardens in Hongkong.

"The young appear to be about a fortnight old, and are able to fly twenty or thirty yards. Their irides are dark brown, upper parts brown, underparts dull white, under tail-coverts chestnut; length 4 inches. They have the white cheeks and dark crest of the mature bird."

PHYLLORNIS ICTEROCEPHALA. The Malayan Green Bulbul.

By no means rare in the south of the peninsula—in fact, rather common in the country round Malacca; but I seldom saw it in Pêrak. It is very like, but smaller than Blyth's *Phyllornis jerdoni.*

Length 6¾ inches. Irides brown; legs plumbeous; upper parts grass-green, tinged on the nape with yellow; under-parts pale green; chin and throat black; maxillary streak (or rather spot) purple; forehead and cheeks glossy yellow, fading into green on the back of the head; inner webs of quills dusky; shoulder-spot glossy azure blue; tail bluish green.

PHYLLORNIS JAVENSIS (Blyth.). The Green Bulbul.

Though rather plentiful in Malacca collections, I only once myself shot this handsome bird, viz., during August, 1877, in Johor territory, at Bukit Kopong, about forty miles up the Moar river. While in the jungle, on the look-out for specimens, I saw a party of six or seven little green birds fluttering about the ends of the branches of a wild fruit-tree, and pecking at the blossoms. On shooting one it proved to be a most beautiful male Green Bulbul, in plumage exceedingly like *P. icterocephala,* except that its maxillary streak of purple was considerably longer; and it was also a larger bird, being 8 inches in length. Throat and face black; inner webs of wing-quills dusky; rest of plumage bright green, with a golden gloss, pale beneath.

The female is of duller plumage, is without the maxillary streak, and has the throat pale green instead of black.

IORA TYPHIA (Linn.).

I shot a great number of these birds in Pêrak, and occasionally came across one in Singapore. At first I took them for immature specimens of *Iora zeylonica* (Gm.), as they were all marked with black on the back and head, some very much so on the nape: but they varied a great deal in plumage; one I shot during June, at Kuâla Kangsa, a male, had scarcely any black on the head or back, irides *white,* legs and beak plumbeous, tail greenish yellow, with dusky tinge; but I cannot help thinking that this bird was a female, and that I made some mistake in registering it as of the other sex.

Another, a male, shot at Sayong, Pêrak, on 23rd February, had the nape almost entirely black, irides dark brown, and the tail jet-black slightly tinged at its tip with yellowish green. This bird was 5¼ inches in length; outer edges of wing-feathers, and also the underparts, yellow, becoming orange on the throat and breast; wings black, barred with white, ends of the coverts white; flanks covered with silky-white feathers.

Perhaps both *I. typhia* and *I. zeylonica* are found in the peninsula.

IORA VIRIDISSIMA.

One I got at Malacca was about 5 inches in length; plumage dull green, yellowish on the abdomen; patch on eyes and the outer edges of some of the wing-quills pale yellow; wings black, tips of secondaries white, forming two parallel white bars across the wings; tail black.

IRENA MALAYENSIS. The Fairy Bluebird.

This most richly coloured bird is fairy plentiful in the country round Mount Ophir, and is also found in Pêrak, Singapore, and on Penang Hill, but certainly cannot be put down as at all common.

I fail to see the difference between the Malayan Bluebird and the Indian species, *I. puella*; but JERDON, in his "Birds of India," says, "A race from Malaya differs in having the under tail-coverts reaching to the end of the tail, whilst in the Indian bird they are never less than 1¼ inches short of the tail." However, I have before me five specimens—four from Malacca, the other from Pêrak; and not one of them has the under tail-coverts extending to the end of the tail. They are shorter than the tail by ⅗ of an inch in each case. The following is the description of a male shot near Kampong Buâya, in Pêrak, during January, 1877:—

Length 10 inches; irides red; legs and beak black; upper parts and the under tail-coverts (the last ¾ inch short of end of tail) beautiful glossy blue; underparts, wings, and tail deep velvety black.

A female from Malacca is of a dull blue colour, mottled on the head and back with cobalt-blue; under tail-coverts cobalt-blue.

ORIOLUS INDICUS. The Black-naped Indian Oriole.

Though not uncommon in Malacca collections, I but once myself shot one, an adult female, at Tanglin, Singapore, during the last week in September. It agreed exactly with JERDON's description ("Birds of India," vol. ii., p. 109), except that the secondaries were narrowly (not broadly) margined with pale yellow. Being a female, the golden back was slightly tinged with green. The beak was pinky flesh-colour. The stomach contained berries.

COPSYCHUS MUSICUS (Raffl.). The Magpie-Robin.

A most appropriate name, it having the pied markings and quaint manners of the Magpie, and the pleasing song of the well-known Robin Red-breast. It swarms throughout the west of the peninsula, being found everywhere along the mangrove-girt coasts, in the jungles of the interior, and about the roads and gardens of the Settlements, though certainly most plentiful in the neigbourhood of civilization. It is a most pugnacious bird; and I have seen them fighting together so determinedly as to allow themselves almost to be caught before they would separate. They breed during April and May.

In my note-book is :—

"Kuâla Kangsa, Pêrak, 23rd March, 1877. To-day I got two new birds—that is, new to my collection—one of them a Magpie-Robin. When on the ground it reminded me forcibly of our English Magpie in miniature, the perky way it hopped along, flitting up its tail, bending back its head, and every now and then giving a pert bow, together with its black-and-white plumage, made the resemblance very noticeable."

The young have their plumage much mottled with rufous brown. The colours of the male are much darker than those of the female.

CERCOTRICHAS MACRURA (Gm). The Shama.

Justly celebrated for its vocal powers; is found, though not plentifully, throughout the Straits. I got several specimens at Malacca and one at Tanglin, Singapore.

ORTHOTOMUS RUFICEPS (Less.). The Tailorbird.

Common throughout the Straits. I shot it in Pêrak, also frequently saw it about the gardens in Singapore. It is a lively little bird, continually on the move, hopping from twig to twig, and uttering its loud shrill notes.

This Tailorbird makes the same ingeniously constructed nest as the others of its kind. One of these, which I have before me, consists of a large leaf about 10 inches in length, of which the outer edges are drawn together and sewn with regular stitches, with what appear to be threads of tow or cocoa-nut fibre, probably the latter. A bag is thus formed; and its lower end is filled with fine bents and lined with fragments of cotton, making a soft receptacle for the eggs. A male shot at Tanglin, Singapore, on 6th September, 1879, was 5 inches in length, tarsus $\frac{3}{4}$; beak flesh-colour below, dusky above, from gape to tip $\frac{8}{10}$; irides clear pale brown; head and tail rich chestnut; beneath silky white, tinged with buff on the flanks and ear-coverts; upper parts grey-brown, slightly tinged with yellowish green; inner margins of wing-feathers buff.

Cisticola cursitans (Frankl.). The Fantail Warbler.

This tiny bird, identical with the European Fantail Warbler, is found throughout the Straits wherever there is open grass-country, or ground covered with scrub, particularly if it be low-lying and marshy. It is very plentiful in Singapore on those parts of the island where the jungle has been cleared and long "lalang" grass sprung up, with bushes scattered here and there. In my notes is :—

"Tanglin, Singapore, 8th July, 1879. All this afternoon I was collecting small birds in the neighbourhood of Mount Echo—capital collecting-ground. Among the scrub bordering the paddy-fields, Grass Warblers, *C. cursitans*, were very numerous. I watched one of them for a long time, at one moment clinging to the top of a grass-stalk and singing with low, feeble, but melodious notes, the next flitting with an ascending series of jerks high up into the air, and uttering its shrill cry, *pitt! pitt! pitt!*, repeated over and over again, then suddenly ceasing as the bird dropped like a stone straight down into the grass. They seem to me to be exactly like the Fantail Warbler I knew so well in the Mediterranean, and which bred plentifully on the marshy land near Gibraltar. Eggs I saw there were white, covered with small red specks; but they vary very much, if I remember rightly, some being of a uniform blue colour.

"During July I found a nest among the bushes on the waste land bordering the rifle-range at Tanglin; it was a substantial domed structure, built almost on the ground, at the bottom of a tuft of reeds, with many of the stalks regularly woven into it. Though very well hidden, I found it by carefully watching the bird, which got very excited whenever I approached, and so considerably helped me in finding its nest, which, however, was then empty, and afterwards deserted, probably because I slightly moved it when feeling for the eggs."

Budytes flavus (Linn.).

I own to being much puzzled by the Wagtails. their plumage varying so much according to age, sex, and the time of year.

In September, 1877, I shot a Wagtail at Singapore, which I put down as of this species (*B. flavus*). It was a female, head and upper parts brown, tinged with yellowish green, wings dusky, outer edges of the coverts and secondaries greenish white, superciliaries white, beneath yellow, dusky on the breast and sides of neck. Then, again, during October and November, 1879, thousands of Wagtails assembled every morning at daybreak on our gravel parade-ground, an open, elevated space, and a very favourite resting-place for passing birds; and these were most certainly migrating; so tired were they that they would hardly get out of one's way, much less be induced to fly any distance; besides they appeared only during October and November, generally in company with Plover, Pratincoles, and other migrants.

All these I thought to be *B. flavus*, till Mr. DAVISON told me they were *B. taivanus*. During November they were exceedingly plentiful in the paddy-swamps near Mount Echo, Singapore, and fed in such close company with the Sand-pipers (*Totanus glareola*), that I obtained both birds at one shot.

CORYDALLA MALAYENSIS (Eyt.).

Commonly to be seen on meadow-land, also along the ridges in the paddy-fields. I shot specimens in Pêrak and Singapore, putting them down as the Indian species (*C. rufula*, Vieill.) which they are exceedingly like; in fact, my specimens answer *exactly* to JERDON'S description of that bird ("Birds of India," vii., part 1. page 232).

MELANOCHLORA SULTANEA (Hodgs.). The Yellow-crested Tit.

I obtained this handsomely marked Tit in Malacca, also in Johor.

CORVUS ENCA (Horsf.). The Malay Crow.

Mr. DAVISON tells me that this is the Common Jungle-Crow of the Malay States. I found it very plentiful in Pêrak, where it used to collect in great numbers and feed on the refuse from our camp; often two or three of them would attack a Pariah Kite which had secured a piece of offal, and buffet him until he dropped his prize, which his pursuers then fought for among themselves.

The way they collect in the course of a few minutes, when just before scarcely one is to be seen, is most strange.

One morning, I shot a crow just outside my hut at Kuâla Kangsa, there not being half-a-dozen in sight at the time; but almost at once they arrived in dozens, flocking in from all directions, and making such a clamour that for the rest of the morning my hut was simply uninhabitable. I suppose they were abusing me for having shot their comrade, or perhaps lamenting his death; anyhow the noise they made was intolerable.

On the opposite side of the river, exactly in front of our camp, was a patch of cover some two or three acres in extent, where every evening at sunset hundreds of these birds used to assemble to roost; one of them I shot was 19¼ inches in length, beak at front along culmen 2½, tarsus 2 inches; irides very dark brown; plumage black, glossed, particularly on the wings and upper parts, with purple and green.

PLATYSMURUS LEUCOPTERUS (Temm.).

On the 8th August, 1877, I shot a pair of these birds near Bukit Kopong, on the Moar river. Their very loud, clear notes attracted my attention. At the time I was rather puzzled as to their species: their red eyes and the tuft at the base of the beak reminded me of the Drongo Shrikes, while the white markings of the wings gave them somewhat the appearance of exaggerated Magpie-robins. I also saw two which Mr. DAVISON's collector had shot in Johor.

CALORNIS CHALYBEIUS (Horsf.).

This small Myna is very plentiful throughout the west of the peninsula; I obtained it in Pêrak and Malacca, and found it in Singapore during April and May.

Late in September, 1879, with three friends, I landed on Pulau Nongsa to shoot Pigeons, which were said to be plentiful there. None of the large black and white *Carpophaga bicolor* were even seen; but we got several of the common green kind (*Osmotreron vernans*); and the reports of our guns put up enormous flocks, regular clouds, of these Mynas: they had collected to roost among the bushes, with which the middle of the island was covered.

Frightened by our shots, they swept backwards and forwards across the island, skimming over the trees at a great pace; and once passing near, I fired into the thick of them, killing several, all in the uniform metallic-green plumage.

The following is from my notes:—

"Tanglin, Singapore, 1st April, 1879. When we were quartered here more than a year ago, the Spotless Starlings, as we call them, used to congregate in great numbers on the upper limbs of an enormous tree, dead and quite bare of all foliage, which stood a few hundred yards from our mess; this afternoon I found them as numerous there as formerly, and watched them building their nests, carrying straw and other soft materials into the holes in the upper parts of the tree-trunks, far out of reach, the lowest nest being at least a hundred feet from the ground, and the tree as smooth and branchless as the mast of a ship.

"I managed to shoot a couple of the birds, and dissected them. Hitherto I thought the dark ones of uniform metallic-green plumage were all males; but on examining these I found this not to be the case, the ovaries being very conspicuous in the dark-coloured bird, while in the other, of grey mottled plumage, I detected the testes, though they were very small. Their stomachs contained seeds, vegetable substance, and the remains of caterpillars.

"*Descriptions*:—

"No. 1. A female, length 7$\frac{1}{5}$ inches, irides pale crimson, legs and beak black, plumage black, very richly glossed with metallic green, feathers of the neck very lanceolate.

"No. 2. A male (immature), length 8 inches, irides, legs, and beak as in female, plumage very slightly glossed with green, upper parts dusky, the feathers edged with grey, underparts greyish white, the feathers dashed with dark central streaks."

Every year, about the end of July, these birds collect in great numbers among the trees in the gardens round the bungalows at Tanglin, to feed on the berries; on 31st July, 1879, I shot several of them, some in the dark green, others in the dusky spotted plumage; but the last were far the more plentiful. I think I am correct in putting down the birds of spotted plumage as young, both the sexes when adult assuming the uniform metallic-green plumage—and in saying that the irides of the immature birds are yellow, orange, or pink, increasing in intensity as the bird advances in age, until they become deep red in the fully-grown bird.

They assemble towards evening and roost in company, several flocks often occupying the same clump of trees.

Eulabes javanensis (Osb.). The Hill-Myna.

This Myna is found in Pêrak, and in all the Straits Settlements; the Malay name for it is an imitation of the peculiar notes it utters.

"Kuâla Kangsa, Pêrak, 1st May, 1877. Near camp I noticed six large dark-coloured birds sitting on a conspicuous tree, uttering loud, clear cries; so, creeping quietly through the jungle, I got within range and shot one. It proved to be a Hill-Myna in its colours and markings very like but larger than *Gracula religiosa*, Horsfield."

Ploceus baya (Blyth.). The Weaver-bird.

Plentiful on Pulau Penang and the mainland; but I rarely saw it on the island of Singapore. In Pêrak it is very common, breeding from February to June, hanging its long, bottle-shaped nest to the upper branches of trees, generally selecting one standing in some isolated position, such as the middle of a paddy-swamp. I noticed that, as a rule, they built in colonies; and there was one near Kuâla Kangsa where over twenty nests hung, like huge pears, from a single tree standing alone in an open swamp, through which one had to wade knee-deep before the nesting-place could be reached.

On May 18, the birds were hard at work building; and standing motionless beneath the tree, I watched them for a long time. One nest, within fifteen or twenty feet of where I stood, appeared to be almost finished, even to the long, tubular entrance; and I fancy the hen must have seen sitting inside, as I did not see her at all, though the male worked away most industriously, weaving long pliant stems of grass into the body of the nest.

Of this colony quite two thirds of the nests were of the bottle-shape, the remainder exactly like inverted baskets, suspended handle downwards. I cannot help thinking that these basket-shaped structures are simply unfinished nests, perhaps the "failures" of young birds new to the work, which have been rejected as being in some way unsuitable, as they only require the open space on one side of the handle to be filled in (as the repository for the eggs) to make them complete. That they are built specially for the accommodation of the male I do not believe, as, though I have watched attentively on several occasions, I never saw them used by either sex.

I found the lumps of clay, which are stuck inside many of the nests, most frequently in those of the basket-shape, but can form no idea what they can be for. The theory mentioned, though not believed in, by Jerdon, that the birds stick fire-flies on these lumps of mud, so as to light up the inside of the nest by night, is palpably far-fetched; I never saw, or even heard of, the remains of fire-flies being found in the nests. In my book is the following note:—

"Kuâla Kangsa, Pêrak, 6th March, 1877. While Snipe-shooting, I found two curious nests hanging from a tree, at a height of about ten feet from the ground; they were within a few inches of one another, in shape like two gigantic pears, but with different entrances, the smaller being open below like an inverted basket, complete even to the handle, and made of fresh, green grass, while the other, of dry brown material, though also entered from below, had a long funnel leading to a chamber, in which were four young featherless birds and an addled egg, the latter about the size of a Linnet's and white in colour. The tree on which the nests hung was alive with red ants, which most fiercely resented being disturbed."

During June I saw a large flock of Weaver-birds on some paddy-ground near Kuâla Kangsa. They were flitting about, pecking at the grass-seeds, and continually twittering, as one sees Goldfinches doing among the thistles. The heads of the males were golden yellow.

A young male which I shot on 16th May, while in the act of weaving grass into its nest, was 5 inches in length, irides dark brown, legs flesh-colour, tarsus $\frac{8}{10}$ inch, upper parts dull brown, the feathers margined with pale yellowish brown, top of head golden yellow, underparts dull white, throat and face blackish, breast and flanks rufous. The males have the head bright yellow during the breeding-season only; at other times both sexes have brown heads.

Munia maja (Linn.).

This little white-headed Munia is very common throughout the west of the peninsula, including the islands of Penang and Singapore. When the grain is ripe it is to be seen in countless numbers in the paddy-fields. On being disturbed it rises with a feeble, twittering cry, the flocks whirling and twirling over the top of the paddy like clouds of dust on a road when the wind is blowing. It is commonly known in the Straits as the "cigar bird"—a capital name; for, when flying, its white head, brown body, and small size give it very much the appearance of a cigar with the white ash on it.

Munia atricapilla (Vieill.).

Common, though not so much so as *M. maja.* Like that species, it congregates in large flocks. My note-book says:—

"Sayong, Pêrak, 23rd May, 1877. To-day, on the low ground bordering Sayong Jheel, I shot several Munias out of a large flock which rose from the paddy. They are very like *M. maja,* except that they have the head black instead of white.

"One of these, a male, is $4\frac{5}{12}$ inches in length, irides red-brown, beak plumbeous, head, neck, and upper part of breast black, upper tail-coverts golden-chestnut, rest of plumage chestnut, becoming dusky on the tail; its stomach contained a great many minute particles of quartz."

At first I thought this bird was *Munia rubronigra,* Hodgs., which it much resembles; but that species has the middle of the belly, the vent, and the under tail-coverts *black* instead of chestnut.

Munia acuticauda (Hodgs.).

By no means rare during the winter months, or more correctly during the N.E. monsoon: it keeps in small flocks and frequents scrubby ground, not breeding till late in May.

Near Tanglin, Singapore, on 29th July, I found a nest of this Munia, a large, oval mass of bents, built in the crown of a beetle-nut palm; and the young birds, eight or ten in number, though perfectly able to fly away, were flitting about it; so I shot four, in a variety of stages of plumage. The one most decidedly marked was a male: its wings and upper parts were dull brown, becoming whitish on the cheeks and chin, feathers of the back and scapulars pale-shafted, those of the breast, flanks, and upper tail-coverts very prettily marked with alternate crescents of white and brown, abdomen dull white, irides chocolate.

The other three were similar to the above, but not so distinctly marked; two of them were almost without the crescentic markings on the breast and upper tail-coverts.

All four were slightly under 4½ inches in length, and had the legs plumbeous.

In April, 1877, I shot an adult male out of a party of eight which were flitting about some bushes on the banks of the Pêrak river.

Breast clove-brown, the feathers edged and shafted with dusky white, abdomen dirty white, marked with dull brown, under tail-coverts brown.

While flying, the bird's white rump and pointed tail were very noticable.

This species extends eastward to China. While I was stationed at Hongkong, in May, 1878, a pair of these Munias built among the top branches of a bamboo-clump, over 20 feet from the ground, but within two yards of my verandah; the nest was a large domed mass of dry grass and reeds, and without any soft lining.

Though apparently loosely put together, the nest and contents were quite unharmed by a gale which bent the bamboo almost to the ground; on 3rd June there were four eggs, pure white in colour, as are those of all Munias.

AMADINA ORYZIVORA (Linn.). The Java Sparrow.

Found only in Singapore, where it is common, particularly in the neighbourhood of the Botanic Gardens at Tanglin.

Not being met with on the mainland, I think there can be little doubt that it has been introduced into Singapore. Probably in the first instance it was confined in some of the aviaries in the Gardens, whence individuals having escaped have bred and firmly established their species on the island.

They are very tame, frequenting the roads and feeding in company with the common Sparrows (*Passer montanus*). During July, 1879, two pairs had their nests under the eaves of our mess at Tanglin, and continually flew to and fro within a few feet of passers-by.

Passer montanus (Linn.).

The common and only Sparrow of the Straits and Malay peninsula. Its habits are much the same as those of our English bird; like it, it frequents towns and villages, and is rarely seen in the jungle at any distance from habitations. It swarms in all the Settlements, searching among the horse-dung for grain, after the manner of its European brother, which, to a casual observer, it closely resembles.

It builds its large, loosely put together nest of straw and other materials under the eaves of houses or in holes in walls, often ousting the Javan Sparrow which may happen to have previously taken possession, as was the case with a pair which built under the roof of our mess-house.

P. montanus extends eastward to China. In my notes I find:—"Hongkong, 1st Jan., 1879. All the Sparrows here appear to be of one species, the Mountain-Sparrow (*P. montanus*, Linn.). To-day one flew into my window; so, putting it in a cage for an hour, I had a good look at its markings, then let it fly away. It was in beautiful plumage. The white line passing round the back of the neck, and the black ear-patches, are the chief characteristics of the species; and the chestnut markings seemed to me brighter than in the English *P. domesticus*. The sexes are alike."

Treron nipalensis (Hodgs.).

I only once met with this Green Pigeon, at Kuâla Kangsa, and never saw it in any of the Malacca collections, so think it may safely be put down as rare.

Treron capellei (Temm.).

One I got from Malacca measured about 15 inches in length; plumage dull green, pale and bluish on the abdomen and forehead, large patch on the breast bright orange, wing-quills and outer tail-feathers dark slate-colour, the latter tipped with bluish white, wing-coverts narrowly edged with yellow, under tail-coverts cinnamon.

Osmotreron olax (Temm.).

Mr. Davison told me he found this Pigeon common in Singapore, but such was not my experience, as I scarcely ever w it there while the larger species (*O. vernans*) was very abundant.

OSMOTRERON VERNANS. The Green Pigeon.

This handsome bird, the Green Pigeon of Europeans, the "Punei" of the Malays, is very plentiful throughout the country, particularly about the well-wooded islands to the south of the peninsula.

Towards evening they have a regular "flight," dozens passing over the same spot night after night for about an hour before sunset, on their way to roost in some favourite clump of trees; but if much fired at, after a few evenings they change their line.

By waiting for them I have often had very good sport, shooting them as they passed overhead, generally in parties of from five to ten, but occasionally in large flocks. Their flight is very rapid; and being thickly feathered, pretty straight shooting is necessary to bring them down, a stray pellet or two having but little effect, unless a vital part happens to be touched.

There is a tree in the Straits bearing a large hard berry, of which the Green Pigeons are very fond; and when ripe, the birds collect in great numbers to feed on it. One of these fruit-bearing trees grew just outside our mess-house at Tanglin; and by watching near it, we often got several shots in a very short space of time. In my notes I see that near this tree, on 10th September, 1879, "I shot nine in about twenty minutes; nearly all were this year's birds, and capital eating. The males had not fully assumed the beautiful orange breast, that part being only tinged and mottled with different most delicate shades of purple and orange. Their craws were full of berries."

Even these young birds, with comparatively tender skins, took a lot of shot.

In Pêrak I found them breeding during March, among the bushes in the swampy valleys, making a small, flat, and loosely-put-together nest of dry twigs, usually at from 6 to 10 feet from the ground. The eggs were two in number, of a delicate pink colour, but white when blown.

O. vernans is very like, but smaller than, the Indian species (*O. bicincta*); the female is smaller and of duller plumage than the male, and wants the bright orange patch on the breast, which in the case of the males seems to deepen in colour as the bird advances in age.

OSMOTRERON FULVICOLLIS (Wagl.).

I did not meet with this species, but saw specimens which had been shot by Mr. DAVISON's collector in Johor.

CARPOPHAGA ÆNEA (Linn.). The Imperial Pigeon.

This magnificent Pigeon, the "Pergam" of the Malays, is plentiful throughout Western Malaya, keeping in parties of from five to fifteen or twenty.

It is not easily shot, being very wary and usually selecting the highest trees to perch on, often settling so high up as to be out of gun-shot. I got specimens in Pêrak, Lârut, Malacca, Moar, Johor, Singapore, and the neighbouring isles.

On 9th August, 1887, near Segamat, on the Moar river, I shot one while feeding on hard brown berries, in appearance rather like chestnuts, and of such a size as to make one wonder how the bird could possibly get them into its mouth. It was a female, length 18 inches; legs, irides, and nude orbits red; bill slaty; head, neck, and underparts delicate French grey; upper parts beautiful metallic shades of green and blue; wing-quills dusky; under tail-coverts chestnut.

Another, which I shot at Sayong, a hundred miles up the Pêrak river, was rather smaller than the above.

CARPOPHAGA BICOLOR (Scop.).

At certain seasons this large black-and-white Pigeon is not uncommon among the wooded islands to the south of the Peninsula.

During September and October, 1879, while stationed at Singapore, I heard that these birds were plentiful at Pulau Mongsa, Point Miriam, and Tanjong Surat. I made expeditions to those places, but without success, not even seeing a single bird—though the natives were well acquainted with them and told me that sometimes they came in great numbers to feed on jungle-fruit, even showing the particular trees.

TURTUR TIGRINUS (Temm.) The Spotted Dove.

This Dove is exceedingly plentiful throghout the west of the peninsula, where its plaintive cooing is one of the most noticeable of bird-sounds, both away from civilization, and also in the gardens of the Settlements. It is easily tamed, and a common cage-bird among the Malays.

It appears to be almost identical with the Chinese Spotted Dove (*T. chinensis*), which swarms throughout South China. I shot several on the mainland near Hongkong; and the only difference I could see between them and the Malay race was that they were slightly larger, and had the under tail-coverts *ash-grey* instead of white.

A male of the Chinese species, which I shot on the Kowloon Hills, near Hongkong, on 1st June, was 12¾ inches in length, irides dark brown, surrounded by an orange ring, legs dull scarlet.

GEOPELIA STRIATA (Linn.). The Barred Ground-Dove.

This miniature Turtle Dove seems to be rather uncommon in the wild, unfrequented parts of the peninsula, apparently preferring inhabited and cultivated districts.

In Singapore it is common on the low, swampy ground, being particularly pentiful among the Chinamen's gardens in the Mount-Echo, Cluny, and other well-watered valleys in the neighbourhood of Tanglin, where it probably breeds—not that I ever found a nest, but have shot the birds at all seasons. As a rule they keep in pairs, never associating in flocks; at least such is my experience

Throughout the Straits Settlements the Sand-Dove, as it is called locally, is much in request among the natives as a cage-bird, being easily tamed. I cannot say how it got its name of Sand-Dove, unless on account of its grey plumage, my Malay syce had one which, on his approaching its cage, expressed its deligth most demonstratively, fluttering its wings and cooing loudly, while a stranger made it wild with fear.

CHALCOPHAPS INDICA (Linn.). The Bronze-winged Dove.

Apparently identical with the Indian bird. It is distributed throughout the west of the peninsula. I found it fairly plentiful in Pêrak, and while stationed there kept several in my aviary, where they throve on rice and Indian corn, in a short time becoming very tame.

On account of their beautiful plumage and the ease with which they are tamed, they are in considerable request as cage-birds, and find a ready sale in all the Settlements.

Among the Malays they go by the name of the "bodoh" (fool) Pigeon; and if the native account of the way they are caught be true, the name is well deserved.

According to one of the Malacca bird-catchers, after having discovered a place frequented by these Doves, generally an open space near high jungle, he concealed himself in a small hut of boughs, and scattered rice on the ground all round him; in a short time the birds flew down to feed on the grain, and settled so close to his hiding-place that, quietly putting out his hand, he was able to catch them one after another, the sudden and strange disappearance of one of their number not in the least alarming the others.

Their note is a low cooing.

Pavo muticus (Linn.). The Burmese Peafowl.

Not uncommon in the north, but rarely met with in the southern half of the peninsula; and though I saw a fine cock which had been shot at Cape Romania, opposite the island of Singapore, it was probably only a straggler, possibly a bird which had escaped from captivity. Anyhow, with this exception, I never heard of a Peacock being obtained so far south.

I believe they are plentiful in Kĕdah; and near Kuâla Kangsa, in Pêrak, I once saw, but was unable to shoot, two Peafowl.

"7th May, 1877. This evening, at dusk, I was lying in wait, in a swampy ravine with steep jungly banks, for a large boar which frequented the place.

"Daylight had almost faded away; and the stillness was broken only by the weird jungle-noises which commence as darkness comes on. In a few minutes more it would have been too dark to shoot; and I was just thinking of making a move, when close behind me a Peafowl uttered its wild and, under the circumstances, startling cries; and the next moment two large birds flew overhead, and settled among the trees on the opposite side of the ravine. At the same time I heard a rustling in the bushes, which was probably caused by the boar, warned by the Peafowls' cries that all was not safe.

"Clambering up the sides of the ravine, I got within thirty yards of the birds before they rose, but, having only a rifle with me, was unable, in that light, to secure one. Still there was very little doubt as to what they were."

Argusa giganteus (Temm.). The Argus Pheasant.

This magnificent bird cannot be rare in the interior of the country, as numbers are snared and brought into the Settlements by the Malays; but it is so shy, and frequents such dense jungle, that it is very seldom seen. Personally I never saw it wild—though while in Pêrak I had several brought alive to me by the natives, also when at Malacca I saw the skins of some which had been obtained near Mount Ophir.

During January, 1877, I spent a few days in a boat on the upper reaches of the Pêrak river, shooting and collecting. One afternoon, not very far from Kampong Senggang, I landed, and striking inland a few hundred yards, came to a small marsh, round its edges shooting a great many Golden Plover (*Charadrius fulvus*), Lapwing (*Lobivanellus atronuchalis*), and Snipe (*Gallinago stenura*).

While busy shooting, the banging of my gun attracted some Malays, who came to me, bringing with them a Crested Partridge (*Rollulus roulroul*) and a splendid male Argus Pheasant, both having been but lately snared, as the nooses were still hanging to their legs; but its captors had spoiled the beauty of the latter by pulling out its long delicately-marked tail-feathers and sticking them in their head-handkerchiefs. For 75 cents (about three shillings) I got both the birds, with a small monkey and wicker cage thrown in, the latter ingeniously made by splitting a bamboo and spreading the split pieces out into an extinguisher-shape.

On getting back to Kuâla Kangsa I turned the Pheasant into my aviary, where it did exceedingly well, becoming as tame as a barn-door fowl, and running to the door of the aviary when I approached, to take food almost from my hand. On leaving the country I gave this bird to Mr. Hugh Low, H.B.M. Resident, and about two months later heard from him that twice it had escaped into the jungle and had been given up as lost, but on each occasion, after remaining away for about twenty-four hours, it had returned and walked into its cage.

I think this incident worthy of notice, having often heard that the Argus Pheasant is very difficult to tame.

Once or twice I received information that some of these Pheasants had been shot; but on investigation the birds always turned out to be Peacock-Pheasants (*Polyplectron bicalcaratum*); and I never heard of an Argus being obtained with the gun.

Besides in Pêrak, I got specimens from near Thaipeng, in Lârut, and from Malacca—at the latter place a sovereign (5 dollars) being the regular charge for a skin.

While in camp at Kuâla Kangsa, we had Argus Pheasants cooked on several occasions, and found them capital eating.

Polyplectron bicalcaratum (Linn.). The Malayan Peacock-Pheasant.

Not rare in the uninhabited parts of the Peninsula; the natives snared and brought several to our camp at Kuâla Kangsa, and told me that they were very plentiful about two days' journey further up the river. Those in my aviary never became tame, hiding directly any one approached; but they throve remarkably well, feeding on rice and Indian corn.

Alectrophasis erythrophthalmus (Raffl.). The Rufous-tailed Pheasant.

I had one of these Pheasants in my aviary at Kuâla Kangsa; it flourished and became fairly tamed. It fed on rice and Indian corn. I got it from the native who had snared it. There were specimens in the Museum, also in the Botanic Gardens at Singapore.

Euplocamus vieilloti. The Fire-backed Pheasant.

A magnificent bird, common in Pêrak, particularly towards the north. While at Kuâla Kangsa, I had them frequently brought in by the Malays, and kept several, both males and females, in my aviary for several months.

They did well in captivity, becoming tame, and feeding on boiled rice, plantains, jack-fruit, and Indian corn.

[*To be continued.*]

H. R. KELHAM,
Captn., 74th Highlanders.

MALAY PROVERBS.

WHEN commencing the publication of a collection of Malay proverbs in the first number of this Journal in 1878, I took occasion to explain that the specimens then printed were exclusive of a large number which might be consulted by the curious in the pages of the Malay-French Dictionary of the Abbé Favre and the work of M. Klinkert.* In order to make sure that I was not reprinting proverbs already published with explanations in French or Dutch by those authors, it was necessary to go carefully through their collections, many of the proverbs in which I had myself collected independently before those works came to my knowledge. In the course of this occupation, all the examples given by M. Favre were copied and translated. The publication of the collection of proverbs which appeared in the first three numbers of the Journal of this Society having, I have reason to believe, created some interest in the subject, I venture to offer to the Society this earlier collection, many of the examples in which are, perhaps, in more general use than most of those formerly published, though they are not easily accessible to Malay students who may happen to be ignorant of French or Dutch.

All the proverbs now published are to be found in the works of Favre and Klinkert, but I have departed, in many instances, from the explanations given by those commentators, and am responsible for all that is here printed in small type. Some examples given by Favre as proverbs, but which are obviously merely rhetorical expressions or idiomatic phrases, are omitted.

The proverbs from the collection of Klinkert are distinguished by the sign *Kl.* and reference numbers. The letter *M.* followed by a numeral indicates a reference to my own collection of Malay proverbs published in this Journal in 1878-9. *Hk. Ab.* signifies "Hikayat Abdullah"—a work by Abdullah bin Abdul Kadir, Munshi, from which many of these proverbs are taken.

The order adopted is alphabetical.

W. E. MAXWELL.

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* "Eenige Maleische Spreekwoorden en Spreekwijzen, Verzameld, Vertaald en Opgehelderd" door H. C. Klinkert.

1 اد ݢولا اداله سموت

Ada gula ada-lah semut.

"Where there is sugar, there are ants." Kl. 63.

Where food is to be got, or money to be made, there people will always congregate.

Cf. *Lalat chahari puru.* "The fly seeks the sore." Where the carcase is, there will the eagles be gathered together.

2 اداكه اير يڠ ڤنوه دالم توڠ ايت بركوچق ملينكن اير يڠ ستڠه توڠ
ايت جوݢ يڠبركوچق

Ada-kah ayer yang pĕnoh dalam tong itu ber-kochak me-lain-kan ayer yang sa-tengah tong itu juga yang ber-kochak.

"Will water which fills a bucket shake about? It is the half-filled bucket which is unsteady." Kl. 79. Hk. Ab. 108.

Really learned men make no noise, but only those who are moderately instructed.

The proverb is more familiarly quoted as follows:—

Ayer yang pĕnoh di-dalam tong itu tiada ber-kochak, me-lain-kan yang sa-tengah tong juga.

3 اداكه درڤد تلاݢ يڠ جرنيه ايت مڠالير اير يڠ كروه

Ada-kah deri-pada tĕlaga yang jernih itu meng-alir ayer yang kĕroh.

"Can muddy water come from a clear well?" Kl. 5.

From a good man, nothing but good can proceed. Hk. Ab. 400.

4 اداكه دوري دڤرتاجم

Ada-kah duri di-per-tajam.

"Does one sharpen the thorns?"

If a person is thoroughly vicious already, what more is there to teach him in that line?

5 ادڤون انجيڠ ايت جكلو دڤوكل سكاليڤون براولڠ٢ جوݢ اي كڤد
تمڤة يڠ باڽق تولڠ اية

Ada-pun anjing itu jikalau di-pukul sa-kali-pun ber-ulang-ulang juga iya kapada tampat yang baniak tulang itu.

"Notwithstanding blows, a dog will always come back to the place where there are plenty of bones."

One always comes back to where one's real interests lie.

6 ادڤون ڤيڤية اية سام ڤيفية جوݢ دان يڠ اڠݢڠ سام اڠݢڠ جوݢ

Ada-pun pipit itu sama pipit juga dan yang enggang sama enggang juga.

"Sparrows with sparrows and hornbills with hornbills."

"Like to like."

7 ادڤون ماٴنيكم اية جكلو دجاتهكن كدالم لمباهن سكاليڤون تياد اكن هيلڠ چهياڽ

Ada-pun manikam itu jikalau di-jatoh-kan ka-dalam lembah-an sa-kali-pun naschaya tiada akan hilang chahaya-nia.

"A precious stone, though it fall into the mire, does not there-"by lose its brilliancy." Kl. 1. Hk. Ab. 330.

A man of good family and well-bred, though he should be reduced to poverty, will lose nothing of his natural nobility.

8 ادفون هريمو اية دتاكوتي اورڠ اوله سبب ݢيݢيڽ مك جكلو تياد لاݢي
ݢيݢيڽ اڤاكه دتاكوتكن اورڠ اكندي

Ada-pun harimau itu di-takut-i orang uleh sebab gigi-nia maka jikalau tiada lagi gigi-nia apa-kah di-takut-kan orang akan dia.

"One fears tigers on account of their teeth, but if they have "no teeth left, why should men be afraid of them." Kl. 80. Hk. Ab. 308.

Said of oppressors who are to be feared while they have power in their hands, but for whom one need not care once their power is gone.

Not a proverb, but a quotation.

9 ادفون هيتم مات اية دمانكن بوله برچري دڠن ڤوتهڽ

Ada-pun hitam mata itu dimana-kan bulih ber-cherei dengan puteh-nia.

"The pupil of the eye cannot be separated from the white." (*i.e.*, they move together, not independently).

Said of things which though a complete contrast one to the other are nevertheless necessary one to the other. A quotation.

10 ارڠ اية جكلو دباسوه دڠن اير ماور سكاليڤون تياد اكن ڤوته

Arang itu jikalau di-basoh dengan ayer mawar sa-kali pun tiada akan puteh.

"Charcoal even though it be washed with rose water, will not "become white." Kl. 2.

"What is bred in the bone will not come out of the flesh." See M. Nos. 6 & 7.

11 اصلڽ كودا اية كودا جوڬ دان كلدي اية كالدي جوڬ

Asal-nia kuda itu kuda juga dan kaldei itu kaldei juga.

"A horse is by nature a horse and an ass is an ass." **Hk. Ab. 178.**

We are what nature makes us and cannot alter our personality.

12 اڠكة باتڠ كلوار چاچيڠ ݢلڠ٢

Angkat batang kaluar chaching gelang-gelang.

"On the log being lifted, out come the worms *gelang-gelang.*" Kl. 39.

Unintelligible. *Gelang-gelang* is the name of an intestinal worm.

13 اڤبيل اير تنڠ جاڠن دسڠك تياد بواي

Apa-bila ayer tenang jangan di-sangka tiada buaya.

"When water is still, do not imagine that there are no crocodiles." Kl. 85.

When things appear calm, do not imagine that there is no possibility of danger. *Ne credas undam placidam non esse profundam.*

14 اڤاكه كون بولن ترڠ دالم هوتن جكالو دالم نكري الڠكه بايقڽ

Apa-kah guna bulan tĕrang dalam hutan jikalau dalam negri alang-kah baik-nia.

"Why does the moon shine in the forest? Were it not better "that she should illuminate inhabited places?" Kl. 7.

Why go and do great things in a foreign country? Would it not be better to do them in one's own country for the benefit of friends and relations? See M. No. 4.

15 افي اية فد تتكل كچيل ياءية كاون اڤبيل بسر منجادي لاون

Api itu pada tatkala kechil iya itu kawan apabila besar men-jadi lawan.

"Fire when small is a friend, but when large it is an enemy." Kl. 81. Hk. Ab. 432.

This proverb comes from the "Hikayat Abdullah." ABDULLAH was accustomed to mix with English people a good deal, and it is probable that he may have heard the saying "Fire is a good servant but a bad master," and put it into Malay.

There is no allegorical meaning. This is a simple phrase or statement.

16 امبل ڤاتيڽ بواڠكن همڤسڽ

Ambil pati-nia buang-kan hampas-nia.

"To take the sediment (flour of sago or tapioca) and throw "away the refuse (fibre)." Kl. 84.

To take out of a thing what is good and reject what is worthless.

17 انتڠ سابوت تمبول انتڠ باتو تڠݢلم

Untong sabut timbul, untong batu tinggalam.

"The lot of cocoa-nut fibre is to float, and the lot of a stone is "to sink." Hk. Ab. 217.

Each one must take what chance and fortune send him.

18 اندہ خبر دري روڤ

Endah khabar deri rupa.

"The rumour is better than the reality." Kl. 38.

Said of something which has been over-rated by public report and which produces a feeling of disappointment when encountered for the first time.

19 انق٢ ايكن كچيل منجادي مكانن ايكن يڠبسر٢

Anak-anak ikan kechil men-jadi makan-an ikan yang besar-besar.

"Little fishes are the prey of large ones." (Sajarah Malayu, 6.)

The small are always at the mercy of the great.

20 انجيڠ دتڤوء كڤالا منجوڠكيت ايكور

Anjing di-tepuk kapala men-jongkit ekor.

"If you pat a dog on the head, he wags his tail."

Take notice of an inferior, and he will be a thousand times fonder of you than you are of him.

21 انق كوچيڠ منجادي هريمو

Anak kuching men-jadi harimau.

"The kitten has become a tiger." Hk. Ab. 440.

A race which has improved, the descendants being superior to their ancestors.

The same figure reversed is used to describe degeneracy:—

Malu jikalau anak harimau men-jadi anak kuching. "It is a shameful thing "if a young tiger becomes a kitten." (FAVRE *sub voce* "*Kuching*.")

22 اوبر٢ ايرڽ هيتم

Ubar-ubar ayer-nia itam.

"Water in which 'ubar-ubar' has been soaked will be black."

A man takes the character of his associates. (MARSDEN.)

23 اورڠ مڠنتوق سورڠكن بنتل

Orang mengantuk sorong-kan bantal.

"Pushing a pillow under the head of one who is sleepy." Kl. 83. Hk. Ab. 3.

Said of praise or encouragement given to some one committed to a particular line of conduct and which is therefore sure to please him.

24 اورڠيڠ تانم ڤوكوء ڽيور تركادڠ٢ تياد ماكن بواهڽ

Orang yang tanam pokok nyior ter-kadang-kadang tiada makan buah-nia.

"It sometimes happens that the man who plants the cocoa-nut "does not eat of its fruit." Kl. 78.

Said of some one who carries out some useful project, of which others reap the benefit.

25 اورڠيڠ منوڠڬو ڤريڬي بيلا كه اي ماتي دهڬ

Orang yang menunggu pĕrigi itu bila-kah iya mati dahaga.

"Will the guardian of a well die of thirst?" Kl. 28.

Will a man who has the management of money allow himself to be short of it?

26 اوكر باجو دبدن سنديري

Ukur baju di-badan sendiri.

"To measure the jacket by one's own body." Kl. 41.

To judge others by ourselves. To attribute evil motives, because we are ourselves bad.

27 اولر دڤوكل جاڠن ماتي كايو دتاڠن جاڠن ڤاته دان تانه ڤون جاڠن چاچة

Ular di-pukul jangan mati kayu di-tangan jangan patah dan tanah pun jangan chachat.

"Let the snake be struck but not killed, let not the stick in "the hand be broken, or the ground be disturbed." Kl. 44.

Compare—

Rambut di-tarik jangan putus tepong pun jangan ter-sêrah. "If there is a "hair in flour, pull it out gently and gradually, not so as to spill the flour."

Go about a thing with discretion. The Perak version of the proverb differs from this. There the natives say:—

Memukul ular biar mati, rumput jangan layu, tanah jangan lembab, pemukul jangan patah.

28 امفام انجيڠ ماكن مونتهڽ

Umpama anjing makan muntah-nia.

" Like a dog which eats what it has vomited."

A simile for stingy, miserly conduct.

29 امفام اورڠ چمفق بوڠا دبالس چمڤق تاهي

Umpama orang champak bunga di-balas champak tahi.

" Like one who throws a flower and receives dirt in return."

A benefit recompensed by ingratitude.

30 امڤام اورڠيڠ مميليهاراكن ديريڽ دالم. سارڠ لبه

Umpama orang memelihara-kan diri-nia dalam sarang lebah.

" Like the way in which a man protects himself in a bee's " nest."

(Livre de Lecture, No. 7, p. 95.)

31 امفام اير دڬڠكم تاء تيريس

Umpama ayer di-genggam ta'tiris.

" Like grasping water without letting it slip through the " fingers." Kl. 169.

A simile to denote the extreme of stinginess.

32 امڤام بواه كڤايڠ دماكن مابق دبواڠ سايڠ

Umpama buah kapayang di-makan mabuk di-buang sayang.

" Like the *kapayang* fruit, which stupefies if it is eaten and " which it seems a pity to throw away." Kl. 82.

Pretty but useless.

The Perak version has *pahit* (bitter) for *mabuk.*

33 امقام كاسيهكن بوڠا سچيفر تربواڠ بوڠا سكاكي

Umpama kasih akan bunga sa-chepir ter-buang bunga sa-kaki.

"To throw away one flower in order to get a dish-full."

A little thing must be sacrificed to a great one.

(Livre de Lecture, No. 7. p. 95.)

The reverse is more easily intelligible:—

Sayang-kan bunga sa-kaki ber-buang bunga sa-chepir.

34 امقام كستوري كارن باوپ مك هيلڠ پاواپ

Umpama kasturi karana bau-nia maka hilang niawa-nia.

"Like the musk-deer which for the sake of its scent loses its "life."

Cf. *Mati rusa karana jijak, mati kuang karana bunyi.* M. 301.

35 امفام كيجڠ درنتي دڠن رنتي امس جكلو اي لڤس لاري جوڭ اي كهوتن ماكن رمڤوت

Umpama kijang di-rantei dengan rantei amas jikalau iya lepas lari juga iya ka-hutan makan rumput.

"Like a deer fastened with a gold chain, if he is let loose he is "off to the forest to eat grass."

No one can abandon his natural disposition. Cf. M. 6.

"Chassez le naturel, il revient au galop!" (DESTOUCHES.)

36 اوڤس برهولم راچون

Upas ber-hulam rachun.

"One poison mixed with another."

or

Kachubong ber-hulam ganja.

"One intoxicating drug mixed with another."

One evil or misfortune brings another.

"Misfortunes never come singly." Cf. *Lagi jatoh lagi di-timpa tangga.*
"Not only tumbled down, but bit the stairs into the bargain."

37 اونتا مپرهكنديري

Onta menierah-kan diri.

"The camel resigns itself [to the load]."

Cf. "To kiss the rod."

38 ايتق داجر برنڠ

Itik di-ajar be-renang.

"The duck is taught to swim." Kl. 77.

"To teach one's grandmother," &c.

Cf. Javanese. *Bebek di-wuruk ngelangi.*

39 اير دتتق تياد اکن ڤوتس

Ayer di-tetak tiada akan putus.

"Water cut will not split." Kl. 49.

Quarrels between married people, or between relations and friends, are not of long duration.

Another version of the proverb is:—

Ta'kan ayer di-parang putus.

There is a Hindustani proverb nearly identical with it:—

Lathi-se pani juda nahin hota. "Water is not to be divided with a stick." (See Journal, Straits Branch, R. A. S., No. 3, p. 48.)

40 ايرسام ايرکلق منجادي ساتو سمفه ايت کتڤي جوڬ

Ayer sama ayer kelak men-jadi satu sampah itu ka-tepi juga.

"Water will mingle with water and become one, but the scum "goes to the side all the same." Kl. 57.

The great mix with the great and as a consequence the humble are put on one side.

41 ايم فوته تربڠ سيڠ

Ayam puteh terbang siang.

"A white fowl which flies by day."

See M. 16 and 17.

42 بارڠ ترڬڠڬم جاته ترلڤس

Barang ter-genggam jatoh ter-lepas.

"That which was within the grasp falls released." Kl. 93.

What we thought we held safely eludes the grasp.

An idiomatic phrase quoted when some misfortune occurs in an unexpected quarter, *e. g.*, the death of a child, or the faithlessness of a lover.

43 بارڠسياف براني مڠمڠ تادافتياد براني ملاون جوڬ

Barang siapa bĕrani mangmang ta'dapat tiada bĕrani me-lawan juga.

"He who ventures to threaten should also be bold enough to "fight." Kl. 88.

"To make good one's word."

KLINKERT and FAVRE have *meng-amang-amang*. MARSDEN gives the word *amang*. In Perak the word is *mangmang*. Cf. M. 253.

44 بارڠسياڤ مڠݢالي لوبڠ اي جوݢ ترڤروسق كدالمڽ

Barang siapa meng-gali lobang iya juga ter-prosok ka-dalam-nia.

"Whosoever digs a pit he shall fall into it himself." Kl. 92. Hk. Ab. 165.

He who lays a snare for his neighbour will probably suffer for it. Cf. Proverbs, XXVI, 27.

See Journal, Straits Branch, R. A. S., No. 3, p. 49.

45 باݢي تندق برسندي ݢاديڠ

Bagei tanduk ber-sendi gading.

"Like horn set with ivory." Kl. 163.

An unequal match.

46 باليق بلاكڠ لاين بيچارا

Balik belakang lain bichara.

"Behind the back another style of language." Kl. 87.

Said of false friends who say one thing to a man's face and another behind his back.

47 بايك ماتي دڠن نام يڠبايك جاڠن هيدڤ دڠن نام يڠ جاهة

Baik mati dengan nama yang baik jangan hidup dengan nama yang jahat.

"It is better to die with a good name than to live with a bad "one." (Hang Tuah, 89.) Cf. M. 230.

48 براڤ برت مات ممندڠ برت جوݢ باهو مميكول

Ber-apa bĕrat mata memandang bĕrat juga bahu memikul.

"Seemingly heavy to the eyes which look at it, but really "heavy to the shoulders which have to carry it." Kl. 58.

A thing may seem easy enough to the looker on or to one who volunteers advice, though it may be quite the reverse for the man who has to perform it. The man who has to do a thing knows his own business best.

49 براڤ تڠݢي تربڠ باڠو اية اخرڽ هڠݢڤ اي دبلاکڠ کربو جوݢ

Ber-apa tinggi terbang bangau itu akhir-nia hinggap iya di-bĕlakang kerbau juga.

“However lofty may be the flight of the white paddy-bird, it “ settles on the buffalo’s back after all.” Kl. 91. Hk. Ab. 108.

However long we may live in the world and however lofty our station, we must die in the end.

50 براڤ ڤنجڠ لونجور بݢيتوله سليموت

Ber-apa panjang lunjur bagitu-lah salimut.

“According to the length of the body, so must the length of “ the sheet be.” Kl. 71.

A man’s actions should be in accordance with his state in life. “Cut your “coat according to your cloth.”

Cf. Hindustani. *Jitni chadar utna pauw phailana.* “Stretch your legs according to the length of your blanket.” (Journal, Straits Branch, R. A. S., No. 3, p. 50.)

51 براني مالو تاکوت ماتي

Bĕrani malu takut mati.

“Ready to face shame, but fearful of death.” Kl. 94.

Said of those who prefer to suffer dishonour than to expose themselves to the inconveniences attending the defence of truth and right.

The converse also holds good :—

Bĕrani mati takut malu.

52 بربوڽي باتو بربوڽيله دي

Ber-bunyi batu ber-bunyi-lah dia.

“When a stone speaks so will he.” Hk. Ab. 123.

Said of a person caught in the commission of an offence and who has no answer to make.

53 برفيکرکن دوسنڽ اية عالم اين دان بيلالڠ دسڠکاڽ هلڠ

Ber-pikir-kan dusun-nia itu alam ini dan bilalang di-sangka-nia lang.

“To think that one’s village is the whole world and to take ‘ grasshoppers for eagles.” Kl. 86.

54 برݢيلر کبوريتن

Ber-gilir ka-burit-an.

“To wear ship.”

A nautical term, not a proverb.

Favre has misunderstood Marsden, from whom he takes the phrase.

55 بڠکي ڬاجه بولهکه دتوتڤ دڠن ڽيرو

Bangkei gajah bulih-kah di-tutup dengan nyiru.

"Can a dead elephant be covered over with a sieve?" Kl. 47.

Can an important matter be kept secret? Cf. M. 171.

56 بکيمان ڤوهن تيدقکن تمبڠ دڤانه هللنتر سبب بالوڠ کولية اد دباتڠڽ

Bagei-mana pohon tidak-kan tumbang di-panah halilintar sabab balung kulit ada di-batang-nia.

"Why should not a tree fall when struck by lightning because there is a double bark on the trunk of it?" Kl. 152.

57 بکيمان هاري تاء هوجن کاتق بتوڠ ددالم تلاڬ برتريق سلالو

Bagei-mana hari ta-hujan katak betong di-dalam tĕlaga ber-tĕriak sa-lalu.

"How is it that it does not rain since the frogs in the well are "croaking incessantly?" Kl. 151. See *inf.* 83.

58 بلاکڠ ڤارڠ لاڬي جکلو داسه نسچاي تاجم

Bĕlakang parang lagi jikalau di-asah naschaya tajam.

"Whet the back of a bill-hook, and it will become sharp." Kl. 54.

A fool may be made useful if he be sufficiently instructed and polished.

59 بلوم دودق برلنجور دهول

Belum duduk ber-lunjur dahulu.

"To stretch out the legs before having sat down." Kl. 183.

To spend money not yet received. To count one's chickens before they are hatched.

Often quoted in this form:—

Sa-belum duduk sudah dia ber-lunjur.

60 بنتڠ دلاڠية داڤة دبيلڠ ارڠ دموک تياد سدر

Bintang di-langit dapat di-bilang arang di-muka tiada sedar.

"He can count the stars in the sky, but is not conscious of the "smut on his face." Kl. 73.

To see the faults of others while remaining blind to one's own.

61 بواين ڤون دݢونچڠ انق ڤون دچوبيت

Buayan pun di-gonchang anak pun di-chobit.

"To rock the cradle and pinch the baby at the same time." Kl. 76.

To work both ways. To take the part of one man openly, while secretly encouraging his adversary.

62 بودق۲ موڽية منداڤت بوڠا اداكه اي تاهواكن فائده بوڠا اية

Budak-budak monyet mendapat bunga ada-kah iya tahu akan faidah bunga itu.

"When young monkeys get hold of flowers, do they know the "use of them?" Kl. 90.

Saperti monyet dapat bunga, is the proverb, Hk. Ab. 108. The quotation above is only an application of it.

The simile is applied proverbially when ignorant persons get hold of something they don't understand the beauty or value of and soon spoil it.

63 برڠ ݢاݢق اية چكلو دمنديكن دڠن اير ماور تياد اكن منجادي فوته بولوڽ

Burong gagak itu jikalau di-mandi-kan dengan ayer mawar tiada akan men-jadi puteh bulu-nia.

"You may wash the crow with rose-water, but its feathers "won't become white." Hk. Ab. 124.

Cf. *Arang itu jikalau di-basoh dengan ayer mawar sa-kali-pun tiada akan puteh. Supra*, No. 10. Cf. "Can the Ethiopian change his skin or the leo-"pard his spots?"

64 بوڠاڽ دسونتيڠكن ڤڠكلڽ دتندڠكن

Bunga-nia di-sunting-kan pangkal-nia di-tendang-kan.

"The flower is worn in the ear, but the stalk is cast aside."

Cf. *Bunga di-petik perdu di-tendang.* M. 22.

Favre has *di-berak-kan* instead of *di-tendang-kan*, but I have thought the latter preferable.

65 بوه ممباچڠ بورق كوليتڽ

Buah membachang burok kulit-nia.

"The horse-mango has an ugly rind."

It does not follow that a rough exterior implies a valueless interior. An excellent man may have a homely appearance.

The *machang*, *bachang*, *ambachang* or *membachang* (*mangifera fœtida*) is a fruit much liked by Malays as a *hulam*, or condiment.

66 بيلالڠ تله منجادي هلڠ

Bilalang telah men-jadi halang.

"The grasshopper has become an eagle." Kl. 89. Hk. Ab. 4.

A simile used by ABDULLAH—not a proverb.

Cf. No. 21.—*Anak kuching men-jadi harimau.*
Pijat-pijat men-jadi kora-kora.
Chaching men-jadi ular naga.

67 بهاس اية تياد دجوال اتو دبلي

Bahasa itu tiada di-jual atau di-beli.

"Politeness is not sold or bought." Kl. 22.

"Civility costs nothing."

68 تابور بيجن داتس تاسيق تياد اکن تمبوه

Tabur bijan di-atas tasik tiada akan tumbuh.

"Grain sown on the surface of a lake is not likely to grow." Kl. 8.

To do good to those who cannot appreciate benefits is loss of time.

Cf. *Tampal-kan pasir di-awar lichin tiada akan lekat.* "You may dab "sand on a slippery bamboo, but it won't stick."

You may lavish good advice and counsel on a fool, but it is a fruitless operation.

Bijan, Sesamum Indicum=*lenga*. KLINKERT has *biji-an*, seeds, apparently for *biji-biji-an*.

69 تاڠن يڠ چلاک کرج جاته

Tangan yang chelaka karja jatoh.

"In an unlucky hand everything fails." Kl. 100.

FAVRE'S explanation is not lucid.

No secondary meaning. Not a proverb.

70 تاکوت تيتق لالو تمڤه

Takut titek lalu tumpah.

"From fear of losing a drop the whole is spilt." Kl. 36.

Excessive caution is not always the wisest policy and may defeat its own object. "Nothing venture nothing win." See M. 223.

71 تاكوتكن توما دبواڠكن كاين دري بدن

Takut-kan toma di-buang-kan kain deri badan.

"Out of fear of vermin, to throw away the clothes one is "wearing." Kl. 26.

To sacrifice something important through magnifying some trifling danger

72 تالي يڠ تيݢ لمبراية تاءسوُاڠ ٢ فوتس

Tali yang tiga lembar itu ta'suwang-suwang putus.

"A rope of three strands cannot be easily broken." Kl. 97.

Union is strength.

73 تاهو ماكن تاهو سمڤن

Tahu makan tahu simpan.

"As you know how to eat, know also how to save." Kl. 75.

A maxim enjoining secrecy. The prudent sinner holds his or her tongue. Often quoted in a *pantun*:—

Anak ikan di-makan ikan
Anak sia di-dalam tuar
Tahu makan tahu ber-simpan
Rahusia jangan bahagi kaluar.

74 تبل كوليت موک

Tebal kulit muka.

"The skin of the face is thick."

Brazen-faced, shameless. An idiom only; not a proverb. FAVRE takes it from a Singapore work, "*Hakayat Dunia*" (1855), p. 163.

75 تفوق دادا تاڽ سليرا

Tepuk dada tanya salira.

"Strike the breast and examine the body."

"Look before you leap." Think over an undertaking thoroughly before embarking on it. (*Livre de Lecture*, No. 7, p. 95.)

76 تڤوڠپ فون اي ماهو كويهپ فون اي ماهو

Tepung-nia pun iya mahu kweh-nia pun iya mahu.

"He wants both the flour and the cake."

Unreasonable expectations. To want to eat the cake and have it too.

77 تلنتڠ بريسي اير ترتهارڤ بريسي تانه

Te-lentang ber-isi ayer te-tiharap ber-isi tanah.

"Turned up filled with water, turned down filled with earth." Kl. 173.

FAVRE has quite misunderstood this phrase, which is not a proverb, but an imprecation. The context would be something of this sort:—"If I fail in my "engagement may my fate be that of the cocoa-nut shell *(saperti tampurong* "*iring)*, may I hold water when turned up and earth when turned down," that is "may I never have any luck, but live in misery."

Similar imprecations are:—

Ka-gunong ta'dapat angin ka-lurah ta'dapat ayer. "May I (or he) ascend "mountains and get no wind, and descend into the valleys and get no water."

And—

Sa'perti sa'pohon kayu di-bawah tiada ber-akar di-atas tiada ber-puchok di-tengah-tengah di-gerek kumbang. "May I (or he) be like a tree with no roots be-"low and no shoots above and of which the trunk has been bored into by insects "(*i. e.*, an orphan, childless and diseased)."

This recalls the fearful curse in the Psalms: "May his children be fatherless and his wife a widow," etc.

78 تلنجق جوڭ ميوچق مات

Telunjuk men-chuchuk mata.

"The fore-finger pierces the eye." Kl. 14.

One from whom help was expected turns against us.

See *Pagar makan padi.* M. 115.

79 تلن باتو

Telan batu.

"To swallow stones."

An idiom, not a proverb.

To keep a thing dark, *e. g.*, to find something which a person has dropped and to hold one's tongue about it.

FAVRE translates this idiom by "Filer doux" to "give in" or "sing small."

Cf. *Telan bara.* "To swallow red-hot embers."

Said of a person who is not particular what he eats—the clean or the unclean.

80 تمبؤ كريڠ

Tembok kĕring.

"A dry wall."

Said of a grasping, avaricious man. (FAVRE.)

Not a proverb. The idiom is not known to me, but *belulang kĕring* is a common expression. See M. 134.

81 تولقكن تڠݢ كاكي برايون

Tolak-kan tangga kaki ber-ayun.

"Kick away the ladder and the legs are left swinging." Kl. 74.

For explanation, see M. 43.

82 تياد روتن اكر فون برݢون

Tiada rotan, akar pun ber-guna.

"When there is no rattan, one must use *lianes*." Kl. 98. Hk. Ab. 163.

In default of the right thing, one must be content with a substitute. Cf. "Half a loaf is better than no bread." See M. 236.

83 تياد سبب ايم سيكور مڠتهوي هٰري سيڠ

Tiada sebab ayam sa-ekor meng-tahu-i hari siang.

"It is not by one wretched fowl that we learn that it is day-"light." Kl. 95.

The cock need not flatter himself that the world would not know it was day but for him.

Said of a busy-body who imagines that important events are due to him alone.

84 تياد ماكن نڠكاڽ مك كنا ݢتهڽ

Tiada makan nangka-nia maka kena getah-nia.

"Without having eaten the jack-fruit, he is smeared with its "sticky juice." Kl. 99.

Cf. *Sa-orang makan nangka sa-rata kena getah-nia.* "One man eats the "jack-fruit and all the rest are smeared with its juice."

Quoted when a man gets into trouble without having partaken in the profits of an enterprise: or, where a whole family or community suffers suspicion or punishment through some misdeed from which only one of its members has derived any advantage.

85 تيدق ترباوا سكم

Tidak ter-bawa sekam.

"Unable to carry chaff."

A sneer at laziness—"You are too lazy to carry *sekam* even." A similar idiom is: *Bĕrat siku*, or *pakei gĕlang sampei siku.* "You can't lift your arm" or "You "have got bangles up to the elbows."

86 تيف٢ باتو يڠاد برڬوليق سلالو دالم سوڠي اية تياداله دهڠڬڤ اوله لوموة اکندي

Tiap-tiap batu yang ada ber-golik sa-lalu dalam sungei itu tiada-lah di-hinggap uleh lumut akan dia.

"Moss does not attach itself to stones which are continually "rolling in a river." Kl. 96.

This is suspiciously like a translation of the common English proverb: "A "rolling stone gathers no moss."

A genuine Malay maxim, which nearly approaches it in meaning, is: *Men-chahari jangan lincha.* "When seeking your livelihood don't jump from one "thing to another."

87 تيف٢ بوسق اية مرواڤ جوڬ اداپ

Tiap-tiap busuk itu meruap juga.

"Every kind of filth gives out a smell." Kl. 46.

Everything bad is discovered by means of itself.

A more proverbial phrase is: *Bangkei tiada ka-lihat-an busok-nia ber-bau.* "The carcase is unseen, bnt its putridity is smelt."

88 جاڠن دڬڠڬم سڤرت بارا راس هاڠت دلڤسکن

Jangan di-genggam sa-perti bara rasa hangat di-lepas-kan.

"Don't take it up as one does a hot coal, only to drop it when "it begins to hurt." Kl. 45.

Do not undertake a thing because it seems easy, to abandon it later when difficulties appear.

The proverb as quoted above is an admonitory form. In its simple form it is only descriptive: *Genggam, genggam bara, rasa hangat di-lepas-kan.*

89 جاوه باو بوڠا دکت باو تاهي

Jauh bau bunga dekat bau tahi.

"From afar the smell is that of flowers, when close it is that "of filth."

Distance lends enchantment. Friends separated are most affectionate in their letters, but when they are within reach they are liable to quarrel.

90 جک کربو دڤڬڠ اورڠ تاليڽ جک مانسي دڤڬڠ مولتپ

Jika karbau di-pegang orang tali-nia jika manusia di-pegang mulut-nia.

"Men hold a buffalo by a cord, a man by his word."

Different people are treated in different ways.

91 جکلو اولر مپوسر اکر تياد اکن هيلڠ بيساپ

Jikalau ular meniusur akar tidak akan hilang bisa-nia.

"If a snake creeps round a root, it does not thereby lose its "venom." Hk. Ab. 76, 108.

A great man may be courteous to those in humble position without losing caste.

92 جکلو براف باپق ڤون انجيڠ مپالق بوکية بولهکه رنتوه .

Jikalau bĕr-apa baniak pun anjing menyalak bukit bulih-kah runtoh.

"Though any number of dogs should bark, will the hill fall?" Kl. 102. Hk. Ab. 163.

The clamour of the ignorant will have no effect on a wise man, who is not to be moved by noise.

93 جکلو تياد دافة دبايقکي تتافي جاڠن دفچهکن

Jikalau tiada dapat di-baik-i ketapi jangan di-pechah-kan.

"Although you may not be able to mend it, you need not "smash it up altogether." Kl. 104.

94 جکلو دهولو ايرپ کروه تائدافتياد دهيلرپ فون کروه جوڬ

Jikalau di-hulu ayer-nia kĕroh tiada dapat tiada di-hilir-nia pun kĕroh juga.

"If water is turbid at the source, it will certainly be the same "lower down." Kl. 105. (*Makota Sagala Raja-Raja*, p. 76. R. van Eysinga's Edn., Batavia, 1827.)

As a man's parentage is, so is his own character likely to be.

95 جکلو کاسيه اکن فادي بواڠله اکن رمفوت

Jikalau kasih akan padi buang-lah akan rumput.

"If you value your corn, pluck out the grass."

Sacrifice the useless to the useful.

96 جکلو سچاون ايرتاور دتواڠکن کدالم لاوت بولهکه اير لاوت اية منجادي تاور

Jikalau sa-chawan ayer tawar di-buang-kan ka-dalam laut bulih-kah ayer laut itu men-jadi tawar.

"If a cup of fresh water be poured into the sea, will it thereby "become fresh." Kl. 21.

Anything hopelessly bad is not to be cured by a mild remedy.

97 جکلو سڤوهن کايو باڽق اکرڽ لاݢي تݢوه اڤاکه دتاکوتکن ريبوت

Jikalau sa-pohon ḳayu baniak akar-nia lagi tegoh apa-kah di-takut-kan ribut.

“If a timber-tree has many roots and is firm, why should the “tempest be dreaded.” Kl. 103. Hk. Ab. 163.

A man who through his family connections has many friends and followers and who is himself a man of strength of character, can afford to face all ordinary political storms.

98 جکلو منمڤي جاڠن تومڤه ڤاديڽ

Jikalau menampi jangan tumpah padi-nia.

“If you are winnowing, take care that the grain does not go “away with the chaff.” Kl. 106.

A general injunction to caution in performing any duty.

99 جوال سترا بلي مستولي

Jual sutra bĕli mastuli.

“To sell silk and buy a better stuff.” (Marsden).

To improve one's position. To get rid of the worse and get the better, *e. g.*, to put away a concubine and take a wife.

I have ventured to reverse Marsden's interpretation.

100 جوهري جوݢ يڠ مڠنل مائنيکم

Juhari juga yang mengenal manikan.

“It is the jeweller who can tell a gem.” Kl. 101. Hk. Ab. 3.

Every one knows his own trade best.

Compare the Hindustani proverb:—

“Juhari juhar pachane.”

See Journal (Straits Branch) R. A. S., No. 3, p. 48.

101 چاچيڠ منجادي اولر ناݢ

Chaching men-jadi ular naga.

“The worm has become a dragon.” Hk. Ab. 4.

Figurative expression used of the growth of Singapore in the “Hakayat Abdullah.” See *supra* Nos. 21 and 66.

102 چڠکوڠ سڤرت انتان دچوڠکيلکن دوري

Changgong saperti antan di-chungkil-kan duri.

"Unsuitable, like using a pestle to pick out a thorn." Hk. Ab. 131.

A needle of course is the proper instrument.

This proverb has been misconstrued by FAVRE, who has translated *changgong* (*incompatible*), as "*marvellous*," and has mistaken *antan*, a "*pestle*" or "*rice-pounder*," for *intan* "a diamond." See his Dictionary *sub voce* "*chungkil.*"

103 چوبيت ڤها کيري ڤها کانن ساکيت

Chobit paha kiri paha kanan sakit.

"If the left thigh is pinched the right will also feel the pain."

See M. No. 59.

104 داونڽ جاته ملايڠ بواهڽ جاته کڤڠکل

Daun-nia jatoh melayang buah-nia jatoh ka-pangkal.

"The leaf falls off and is carried away by the wind, but the "fruit falls at the foot of the tree." Kl. 20.

The worthless disappears and is forgotten, but that which is substantial remains.

105 دبوات دڠن کارن الله منجادي مرک الله

Di-buat dengan karana Allah menjadi murka Allah.

"Done for the sake of God, yet provoking the anger of God." Kl. 37.

The above is the version given by FAVRE, but the popular version is:—
Di-buat dengan karana Allah men-jadi karana olak (pretence).

Done with good intentions, but found fault with by others who attribute wrong motives.

106 دتاتڠ سڤرت ميڽق يڠ ڤنوه

Di-tatang saperti minyak yang penoh. Kl. 69.

"Carried on the hand, like a vessel full oil."

Sha'ir Bidasari, 101.

Watched over tenderly and treated with great care, *e.g.*, a favourite child.

107 دتڤوء اير ددولڠ ترڤرچيق موک سنديري جوݢ

Di-tepuk ayer di dulang ter-perchik muka sindiri juga.

"Strike water in a plate with the flat of your hand and it will "fly up in your face." Kl. 40.

If you publish the faults of your relations, the shame will recoil on yourself.

Cf. *Mahu-kah orang meng-hujan-kan garam-nia.* M. 170.

108 دتمڤة تياد هلڠ کات بيلالڠ اکوله هلڠ

Di-tampat tiada halang kata bilalang aku-lah halang.

"Where there are no eagles, the grasshoppers say we are "eagles." Kl. 107. Hk. Ab. 163.

"In the kingdom of the blind, the one-eyed is king." Journal (Straits Branch) R. A. S., No. 3, p. 49.

109 دڠرکن چرترا بورڠ انق دڤڠکو دلفسکن

Dengar-kan cheritra burong anak di-pangku di-lepas-kan.

"She listens to the tale of a bird and puts down the child "from her lap." Kl. 111.

Feminine misconduct.

Cf. M. No. 286.

110 دݢڠݢم تاکوت ماتي دلڤسکن تاکوت تربڠ

Di-genggam takut mati di-lepas-kan takut terbang.

"Grasped, one fears it may die; released, one fears it may fly "away." Kl. 61.

Something that one dares not keep for fear of injury to it, and yet is loath to give up, not wishing to lose it altogether.

111 دهول تيمه سکارڠ بسي

Dahulu timah sakarang besi.

"Formerly tin, now iron." Kl. 112.

Cf. *Dahulu intan sakarang jadi batu blanda.* "Once a diamond, now "chalk." Formerly honoured, now sunk into insignificance.

112 دودق سڤرت کاتق دباوه تمڤورڠ

Duduk saperti katak di-bawah tampurong.

"Sitting like a frog underneath a cocoa-nut shell." Kl. 110. Hk. Ab. 425.

Said of one who is in difficulties out of which he does not see the way.

113 دودق سڤرت كوچيڠ ملومڤت سڤرت هريمو

Duduk saperti kuching me-lompat saperti harimau.

"Crouches like a cat, and leaps like a tiger. Kl. 17.

A quiet person may come out on occasion and shew plenty of spirit.

114 روسق باوڠ دتيمڤا جمبق

Rosak bawang di-timpa jembak

"Onions are ruined when pressed down by their stalks."

The illustration is taken from onions bundled up for export. *Jĕmbak* is the group of stalks which spring from the bulb and which are cut off before it is dried. In packing there is a danger that the short ends of the stalks may press upon the bulbs and if badly dried cause them to decay. *Jĕmbak* also means a double-handful.

Said of a person of great merit who is surrounded by common people.

Hang Tuah, 88.

115 روسق تاڤي كارن راڬي

Rosak tapei karana ragi.

"The cake may be spoilt by the yeast."

Tapei is a native delicacy made of *pulut* rice fermented by *ragi*, a kind of native yeast. If the yeast be bad the cake is spoilt.

KLINKERT'S version is *rosak ragi di-buat tapei*, "The yeast is spoilt by the "cake," but I have been unable to get an intelligible explanation of this.

The meaning seems to be "an honourable name may be lost by a trifling sin."

Cf. *Sabab nila sa'titik rosak susu sa'bĕlanga.* No. 123.

116 ساتو دتتق سڤوله ربه

Satu di-tetak sa-puloh rebah.

"One was cut, but ten fell." Kl. 59.

Said when a reproof or reprimand addressed to one person applies to a great number.

117 ساكيت ڤندن تيدق تاهوكن دوري

Sakit pandan tidak tahu-kan duri.

"To feel the smart of the *pandan* without knowing that it is "caused by its thorns."

Sakit badan tiada tahu akan nasib. Not to know one's shortcomings, Cf. *Parang ta'tahu di-tumpol-nia.* "The *parang* does not know that it is blunt;" it thinks that it is sharp.

118 سارڠ اونم دماسفکي کتم منجادي اومڠ٢

Sarang unam di-masok-i ketam men-jadi umang-umang.

"When a crab (*ketam*) gets into a periwinkle-shell it becomes "an *umang-umang*." Kl. 124.

Umang-umang is the name of the soldier-crab when it is in a shell; outside the shell it is *ketam*.

The meaning is: The same things have different names under different circumstances.

FAVRE in his Dictionary (following KLINKERT) has misunderstood the meaning of *umang-umang*, which he translates "*action de secouer, de remuer, de troubler.*"

119 سبب برکلاهي دغن فريکي اخرپ ماتي دهڬ

Sabab ber-kalahi dengan pĕrigi akhir-nia mati dahaga.

"If you quarrel with the well, in the end you will die of "thirst." Kl. 27.

Don't quarrel with those upon whom your fortune depends.

120 سبب بواه ککنالن فوهنڽ

Sabab buah ka-kenalan pohon-nia.

"The tree is known by its fruit." Kl. 48.

Translated probably from the New Testament, and therefore not a genuine Malay saying.

121 سبب بهاس منڽجکقن بڠسا

Sabab bahasa menunjuk-kan bangsa.

"Manners betray rank." Kl. 43.

The full phrase is: *Usul menunjok-kan asal, bahasa menunjok-kan bangsa.* There is a play upon the words *bahasa* and *bangsa.* "Manners makyth man."

122 سبب تياد تاهو مناري دکتاکن لمبب

Sabab tiada tahu menari di-kata-kan lembab.

"He who does not know how to dance declares that the ground "is wet." Kl. 67.

A bad workman finds fault with his tools. Another version is: *Di-kata-kan lantei ter-jongket.* "Declares that the flooring is uneven."

123 سبب نيلا ستيتق روسق سوسو سبلاڠا

Sabab nila sa-titik rosak susu sa-bĕlanga.

"One drop of indigo will spoil a whole pot of milk." Kl. 35. Hk. Ab. 124.

One little fault may cancel great merits.

Cf. *Panas sa'tahun di-hapus-kan uleh hujan sa-hari.* See *supra* No. 115.

124 ستالي تيݢ واڠ

Sa'tali tiga wang.

"One *tali* equals three *wang.*"

"Six to one and half a dozen the other." "As broad as it is long."

The illustration is taken from the old Dutch coinage formerly in use in Malacca:—

1 real = 24 wang.
½ real = 12 wang.
¼ real = 6 wang.
Sa-tali or ⅛ of a real = 3 wang.

There were ten *duits* to one *wang*. The *wang* was equal to two cents of a dollar, the *wang baharu* to 2½ cents.

125 سدڠكن ݢاجه يڠبسر اية يڠبركاكي امفت لاݢي تركادڠ٢ ترسرندوڠ

Sedang-kan gajah yang besar itu yang ber-kaki ampat lagi ter-kadang-kadang ter-serandong.

"Although the elephant is so big and has four legs, still he "stumbles sometimes." Hk. Ab. 76.

The proverb, as I have heard it quoted in Perak, is: *Gajah ampat kaki lagi ter-sarok, ini-kan pula manusia dua kaki.* "The elephant which has four legs "stumbles nevertheless, so what else can you expect of a mortal who has but "two?" This is a Siamese proverb, and the Malays have got it second-hand:—

"L'éléphant, quoiqu'il ait quatre pieds peut encore faire un faux pas; ainsi "un docteur peut aussi se tromper." (PALLEGOIX—Siam, I, 402.)

"If the mighty elephant, king of four-footed animals, is liable to stumble "and fall, in like manner the wisest man is apt to slide into error." (LOW—"On Siamese Literature"—Asiatic Researches, XX, 373.)

126 سدويت دبله توجه

Sa'duit di-bĕlah tujoh.

"To divide a quarter-cent into seven."

An impossible task; a miracle.

127 سده تيدق ترسودو اوله اڠسا بهارو دبريکن کڤد ايتق

Sudah tidak ter-sudu uleh angsa, baharu di-bĕri-kan kapada itek.

"When the goose won't have it, it is given to the duck."

Said when a woman of bad character on a second marriage falls to man of lower rank than her first husband.

Something that animals refuse is a common simile among Malays for something completely worthless. *Tiada ter-jilat uleh anjing, tiada ter-sudu uleh itek.* "That which a dog would not lick or a duck put its bill into." "Good for "nothing." Cf. M. 9.

128 سده داڤة ݢاديڠ برتوه تندق تيدق برݢون لاݢي

Sudah dapat gading ber-tuah, tandok tiada ber-guna lagi.

"If you have got a lucky piece of ivory, you don't want horn" (*i. e.*, for making the handle of a *kris*).

If one has the best that can be obtained, one has no use for an inferior article. If a man is engaged to marry a rich and pretty wife, he is not likely to take one less desirable.

FAVRE, following KLINKERT, has *chindei* instead of *tandok* and translates the proverb thus: "When one has the magic ivory, the snake *chindei* is no long-"er formidable." The sense of this is not apparent, and *tandok*, which is the version common in Perak, is no doubt correct. If *chindei* is the word, it means a kind of striped silk cloth used as a waist-band, but even so the antithesis is lost.

Cf. *Hilang buntat ber-ganti intan.*

129 سده ݢهارو چندان ڤول   سده تاهو برتاپ ڤول

Sudah gaharu chendana pula.

"We've done with eagle-wood and now it is sandal-wood "again."

Repartee to one asking something which he ought to know and is believed to know already. *Sudah tahu ber-tanya pula.* "You're asking what you "know already."

130 سڠݢوه برجڠݢوت تياد برجبة

Sungguh ber-janggut tiada ber-jobah.

"He has the beard truly, but not the robe" (of the learned man).

He is not what he professes to be.

131 سچوفق تياد بوله منجادي سݢنتڠ

Sa'chupak tiada bulih men-jadi sa'gantang.

"A quart cannot become a gallon." Hk. Ab. 261.

The Malay laws say that the object of every good *penghulu*, or ruler, should be to make the poor man's *chupak* hold a *gantang*. See M. 132.

132 سسل دهول فنداڤتن سسل كمدين ايت سواتفون تياد اڤ ݢونڽ

Sesal dahulu pen-dapat-an sesal kemdian itu suatu pun tiada apa guna-nia.

"To repent in time is gain, but to repent too late is useless." Kl. 118. Hk. Ab. 124.

"Post factum nullum consilium." Cf. M. 207.

133 سكوتوء براس باسه دتمفي تائبرلايڠ داندڠ تائبرانته هوجڠڽ تياد دسودو اوله ايتق

Sa-kutuk bĕras basah di-tampi ta-ber-layang di-indang ta'ber-antah hujung-nia tiada di-sudu uleh itek.

"A measure of wet rice, if you winnow it the chaff won't fly, "if you sift it the grain and husk won't separate, and in the end it "won't be touched by the ducks." Kl. 181.

Good for nothing.

Cf. No. 127. See also M. 278. *Saperti bĕras kumbah di-jual ta'laku, di-tanak ta'mual.*

134 سفرت امس يڠ سده ترسڤوه

Saperti amas yang sudah ter-sepuh.

"Like gold which has been stained red."

A complimentary comparison in describing feminine charms.

135 سفرت اور٢ دتاريق سوڠسڠ

Saperti awar-awar di-tarik songsang.

"Like dragging bamboos the wrong way" (*i.e.*, against the branches). Kl. 117.

Want of tact and management will often render an undertaking difficult. Applied to anything difficult to manage, *e.g.*, an obstinate child. Trying to teach him is like dragging a tree against the way of the branches.

Awar, or *awar-awar*, the large bamboo, is also spelt *hawar* or *hawar-hawar*.

136 سڤرت اومبق ممبنتيڠ ديرين

Saperti ombak mem-banting diri-nia.

"Like a wave which dashes against itself." Kl. 123.

Useless rage.

137 سفرت ايتق منڠرکن ݢنتور

Saperti itek menengar-kan guntur.

"Like a duck in a thunderstorm." *Lit.* "which hears thun-"der.") Kl. 115.

Something that is completely lost upon the person who hears it. He hears, but is none the wiser, like the duck with the thunder.

138 سڤرت ايکن ددالم بلت

Saperti ikan di-dalam bĕlat.

"Like a fish in a fishing stake." Kl. 51.

Used in reference to a state of duress or subjection to the power of some one else, when freedom of action is lost.

Cf. *Laksana ikan di-dalam kêlung.*

139 سڤرت اير دالم ترنڠ

Saperti ayēr dalam ternang.

"Like water in an earthen goglet."

Said of a person who, after having been noisy, becomes quiet.

140 سفرت بوه فادي ماکين برايسي ماکين رنده سفرت بوه فادي يڠ همڤا
ماکين لام ماکين تڠکي

Saperti buah padi, makin berisi makin rendah; saperti buah padi yang hampa, makin lama makin tinggi.

"Like an ear of corn, which the fuller it is of grain the lower "it bends, and which grows tall in proportion to its emptiness."

A man full of learning and ability is modest, while he who has neither is often full of vanity.

The idea is better put in the following admonitory form:—*Buat-lah 'ilmu padi makin ber-isi makin tundok, jangan buat 'ilmu lalang makin lama makin tinggi.*

141 سفرت بوڠا سدڤ دڤاکي لايو دبواڠ

Saperti bunga sedap di-pakei layu di-buang.

"Like a flower which is worn while it is pretty and thrown "away when faded."

Said of a woman made much of while beautiful and neglected when her youth is gone. See *supra* No. 64. Cf. M. 22 and 232.

142 سفرت تبو ايرڽ دماکن همڤسڽ دبواڠ

Saperti tebu ayer-nia di-makan hampas-nia di-buang.

"Like sugar-cane of which one sucks the juice and throws "away the pith." Kl. 122.

To take out of a thing all that is good in it and then leave it. See *supra* No. 16. See the preceding.

143 سڤرت تلور دوا سبندوڠ ڤچه ساتو ڤچه کدوا

Saperti telor dua sa-bandong pechah satu pechah ka-dua.

"Like two eggs attached to each other, if you break one you "break both." Kl. 166.

Said of two persons closely related one of whom cannot be injured without injury to the other. The allusion is to the eggs of the lizard. *Dua sa-bandong*, two attached to each other. *Rumah dua sa-bandong*, two houses attached to each other.

144 سڤرت تلور دهوجڠ تندق

Saperti telor di hujong tandok.

"Like an egg on the end of a horn." Kl. 120. Hk. Ab. 382.

Said of a risky undertaking or business. Ready to fall at any moment.

145 سفرت تمڤوڠ منوجو جيه

Saperti tempung menuju jih.

"As the quoit makes for the peg." Kl. 158.

Said of any one who goes for his object with swiftness and determination. This game and the technical expression used are unknown to me.

146 سفرت تيکوس جاته کبرس

Saperti tikus jatoh ha-bĕras.

"Like a rat which falls-into rice." Kl. 62.

Good fortune. To fall on one's feet. See M. 280.

147 سڤرت درين دڠن منتيمون

Saperti durian dengan mantimun.

"Like the durian with the cucumber." Kl. 165.

Said of two persons who have nothing in common, *e.g.*, the strong and the weak, or the wise and the ignorant.

148 سڤرت رابوق دڠن اڤي

Saperti rabuk dengan api.

"Like tinder with fire." Kl. 114.

Two persons of equal courage and passion, ready to take offence; a word of calumny will set them at each other.

The words *sudah suntoh menyalak*, "if they touch there is a blaze," are often added to the proverb, as above quoted, and complete the sense.

149 سڤرت راج دڠن منتري

Saperti raja dengan mantri.

"Like a Raja with his Minister." Kl. 42. Hk. Ab. 414.

Said of two things which suit admirably. See Nos. 153 and 169.

150 سڤرت روس ماسق کمڤڠ

Saperti rusa masok kampong.

"Like a deer which enters a village." Kl. 56.

To be shy and awkward in an unusual scene, like a country bumpkin in a town.

151 سفرت چاچيڠ کنا اير ڤانس

Saperti chaching kena ayer panas.

"Like a worm touched by hot water."

Said of a person who writhes under the blows of misfortune. See M. 181.

152 سڤرت چنچين دڠن ڤرمات

Saperti chinchin dengan permata.

"Like a ring with the stone set in it." Kl. 42. Hk. Ab. 414.

Said of two things which fit exactly. See Nos. 150 and 169.

153 سڤرت چيچق ماکن کاڤور

Saperti chichak makan kapor.

"As a lizard eats lime."

A Malay chewing betel-nut in his house wipes off on the wall the lime (one of the ingredients) which adheres to his finger. This is greedily eaten by the house-lizard, and has become a simile for any delicacy of which a person may exhibit fondness.

FAVRE has *kapar*, a moth ?

154 سڤرت كافق مپلم بليوڠ

Saperti kapak menyĕlam bĕliong.

"Like the axe diving for the hatchet." Kl. 31.

Cf. *Saperti kuching minta api.* "Like the cat asking for a light." She comes to the kitchen, but never takes the fire after all.

Said of a lazy or stupid messenger. He goes for something, but either takes a long time, or never comes back again.

155 سڤرت كافور دهوجڠ تلنجق

Saperti kapor di hujung telunjuk.

"Like a little lime on the end of the first finger." Kl. 178.

(Which the Malay, after preparing his quid of betel-nut, carefully wipes off).

Particular about a trifle. *Kapor di-hujung telunjuk handak di-buang anak babi dalam pĕrut ta'sedar.* "The lime on the forefinger must be got rid of, but the pig in one's inside is unnoticed." To be very particular in condemning small sins, but to go on committing big ones and shut one's eyes to them. Cf. Nos. 60 and 91.

156 سڤرت كاين خاص داتس دوري

Saperti kain khasa di-atas duri.

"Like fine linen on thorns." Kl. 64.

Difficult to extricate. Requiring great care in handling.

157 سڤرت كربو چوچق هيدڠ

Seperti kerbau chuchuk hidong.

"Like a buffalo with a hole through his nose."

Bound to follow wherever he is led.

158 سڤرت كمبيڠ دكوليتي

Saperti kambing di-kulit-i.

"Like a goat being skinned." Kl. 65.

Very painful; said of the death agony. Malays believe the separation of the soul from the body to be attended with great pain.

159 سڤرت کورا٢ هندق ممنجت ڤوهن کايو

Saperti kura-kura handak memanjat pohon kayu.

"Like a tortoise that wants to climb a tree."

Said of one who wishes to undertake a thing for which he has not enough talent or capacity. Cf. *inf.* No. 199. See M. 122.

160 سڤرت کوچيڠ بيرقکن رمبوت

Saperti kuching berak-kan rambut.

" Like a cat which has eaten hair and finds it difficult to digest." Kl. 162.

To be in difficulty and endeavour to extricate one's self.

161 سفرت کوچيڠ داتس تمبوء

Saperti kuching di-atas tembok.

" Like a cat on a wall." Kl. 50.

On the look out for any wind-fall.

162 سڤرت ݢاجه دڠن سڠکلاپ

Saperti gajah dengan sengkăla-nia.

" Like an elephant with his hobbles." Kl. 167.

163 سفرت ݢونتيڠ ماکن دهوجڠ

Saperti gunting makan di-hujung.

" Like scissors which cut at the point." Kl. 33.

Said of one of whom not much is thought, but who quietly and without noise performs his office.

164 سفرت سي چابول هندق منچاڤي بولن

Saperti si-chabul handak menchapei bulan.

" He is like the braggart who wanted to seize the moon." *Sri Rama.*

He wants to do something beyond his strength or power. *Si-chabul*, swaggerer, braggart.

165 سڤرث سخلة موگ دوا

Saperti sakhalat muka dua.

" Like broad cloth with two different surfaces."

Rough *(kĕsat)* on one side and smooth on the other. " Double-faced." See M. 76.

166 سڤرت سوات بجي سساوي ددالم رمڤوت

Saperti suatu biji sesawi di-dalam rumput.

"Like a grain of mustard in the grass."

Cf. "Like a needle in a bottle of hay."

167 سڤرت سلودڠ منولقكن مايڠ

Saperti saludang menolak-kan mayang.

"As the palm-sheath shoots forth its flower." Kl. 180.

To declare one's self (*menunjuk-kan rupa*); to publish what has been kept secret.

168 سفرت سوسو دڠن شاكر

Saperti susu dengan shakar.

"Like milk with sugar." Kl. 42. Hk. Ab. 414.

Suitability. See Nos. 149 and 152.

169 سڤرت سيره ڤولڠ كݢاݢڠ

Saperti sirih pulang ka-gagang.

"Like a betel leaf which returns to its stalk." Kl. 161.

e.g. A dethroned king restored.

Cf. *Saperti janggut pulang ka-dagu; saperti misei pulang ka-bibir.* See also No. 177.

170 سڤرت ڤارڠ مات دوا

Saperti parang mata dua.

"Like a two-edged blade."

Double-tongued.

171 سڤرت ڤاسير دتڤي ڤنتي مك تتكل تيمڤس اير بولهله كيت بربهاݢيكن

Saperti pasir di-tepi pantei, maka tatkala timpas ayer
buleh-lah kita ber-bahagi-kan.

"Like sand on the sea shore on which we can mark out how "far the water comes." Kl. 164.

A man's servants or family know his disposition.

172 سڤرت ڤڠکّن دڠن مڠکوء ساله سديکيت هندق برنتوء

Saperti pinggan dengan mangkok salah sadikit handak ber-antuk.

"Like a plate and cup which on the slightest shake will knock "against each other." Kl. 159.

Said of two persons related to each other who are always ready to quarrel.

173 سڤرت ڤوچق دڠن ڤلڤه

Saperti puchuk dengan palepah.

"Like the shoot and the leaf of the palm," Kl. 170.

Mutual support. The fronds protect the tender shoot on which the life of the tree depends.

Cf. *Saperti aur dengan tebing.* "Like the bamboo and the river bank."

Inseparable, each has need of the other. When the bank slips, the bamboo falls into the river. When the bamboo falls, it carries the bank with it.

174 سڤرت ڤولوڠ کنا سمبور

Saperti polong kena sambur.

"Like a demon touched with holy water."

To be in a state of fright and ready to beg for pardon.

175 سڤرت ڤيکة کهيلاڠن مات

Saperti pikat ka-hilang-an mata.

"Like a horse-fly which has lost its eyes."

To act in a blundering manner.

An allusion to a cruel practice of Malays who when they catch a gad-fly pick out its eyes and let it go.

176 سڤرة ڤينڠ دبله دوا

Saperti pinang di-bĕlah dua.

"Like a betel nut cleft in two." Kl. 113.

"As like as two peas."

177 سڤرت ڤينڠ ڤولڠ کتمڤوء

Saperti pinang pulang ka-tampuk.

"Like a betel-nut which returns to its calix." Kl. 160.

Cf. No. 169.

178 سڤرة لوة دڠن مرکه

Saperti lot dengan markah.

"Like the sounding lead with its marks" (the knots on the cord). Kl. 168.

Said of a man learned and able who draws after him the ignorant, as the lead does the knots. *Lot=batu penduga.*

179 سفرت ممنجة ترکنا سرودا

Saperti memanjat ter-kena seroda.

"Like climbing a tree and getting caught in the thorns." Kl. 156.

To undertake a thing and not to be able to withdraw from it. *Seroda*, thorns, or some other obstacle tied round a cocoa-nut tree to prevent trespassers from climbing it.

180 سڤرة منڤوڠ تياد يربرس

Saperti menepung tiada ber-bĕras.

"To make flour without rice." Kl. 172.

To undertake a thing without the requiste knowledge or capital. "Bricks "without straw."

181 سڤرت منيوڤ اڤي داتس اير

Saperti meniup api di-atas ayer.

"Like keeping a fire alight upon water." Kl. 70. Hk. Ab. 18.

Used by ABDULLAH in speaking of the difficulty his mother had in rearing him. As difficult as getting a fire to light on the surface of water.

182 سڤرة موپيت منداڤة بوڠا

Saperti monyet men-dapat bunga.

"Like a monkey which has got a flower." Kl. 55. Hk. Ab. 108.

"Pearls cast before swine."
See *supra* No. 62.

183 سڤرة هريمو مپمبوپيکن کوکون

Saperti harimau menyembunyi-kan kuku-nia.

"Like a tiger concealing its claws." Kl. 16.

A rich man who conceals his wealth, or a wise one who is modest about his acquirements.

184 سڤرة هريمو مننجقكن بلڠڽ سڤرة درين مننجقكن ڤڠساڽ

Saperti harimau menunjuk-kan bĕlang-nia ; saperti durian menunjuk-kan pangsa-nia.

"As the tiger shows his stripes and the durian its lines." Kl. 15.

A man of good birth exhibits signs of good-breeding, or a brave man is recognised by his pluck.

185 سڤرت هلڠ مڽوڠسڠ اڠين

Saperti halang menyungsang angin.

"As the fishing-eagle soars against the wind."

Done for effect only, to look pretty. Swagger.

186 سڤرة بنتڠ برتابور بولهكه سام دڠن بولن يڠ ساتو

Sapuloh bintang ber-tabor buleh-kah sama dengan bulan yang satu.

"Will ten stars dotted about be equal to the moon by herself?" Hk. Ab. 275.

Ten handmaids are not equal in beauty to the princess their mistress. One man of ability can do more than a dozen who are without intelligence.

187 سڤوله كڤل داتڠ ڤون انجيڠ برچاوت ايكور جوڬ

Sapuloh kapal datang pun, anjing ber-chawat ekor juga.

"Though ten ships should arrive, dogs will still tuck their "tails between their legs." Kl. 121. Hk. Ab. 275.

Whatever political changes may occur, the condition of the peasant remains unaltered.

See M. 104.

188 سمبول داڤة توتڤڽ

Sumbul dapat tutup-nia.

"The box has found its cover."

Two things which suit each other, *e.g.*, a married couple who live happily. *Sumbul=chembul*, a small metal box or cup with a close-fitting cover, several of which are found in every betel-box to hold the various ingredients used in chewing betel.

189 سمبل ميلم سمبل مينم ايَر

Sambil menyelam sambil minum ayer.

"While diving, to take a drink." Hk. Ab. 136.

To do two things at once, combine business with pleasure, duty with profit to one's self.

190 سيکور کومن دبنوا چينا داڤة دليهة تتافي ݢاجه برتڠکڤ دباتڠ هيدڠ تياد سدر

Sa-ekor kuman di benua China dapat di-lihat, tetapi gajah bertangkap di batang hidong tiada sedar.

"One can see an insect as far off as China and yet be unaware of an elephant being caught on the bridge of one's nose." Kl. 24.

It is easy to discover and magnify the defects of others, but we do our best to ignore our own.

Cf. *Supra* No. 60 and 155.

Another version is: *Sa'ekor kuman di saběrang lautan nampak di-lihat, gajah di-pelupak mata tiada nampak.* The mote and the beam.

191 سئيکور چاچيڠ منلن ناݢ

Sa'ekor chaching menelan naga.

"A worm swallows a dragon." Kl. 119.

The weak defeats the powerful.

192 سياف ماکن نڠکاڤ مک کنا ݢتهڽ

Siapa makan nangka-nia maka kena getah-nia.

"He who eats the jack-fruit will get his fingers sticky."

Cf. *Siapa makan chabei iya-lah merasa padas.* M. 85.

The person who does a thing is the one to bear the responsibility. See *supra* No. 84.

193 سياڤ براني منڠکف هريمو

Siapa běrani menangkap harimau?

"Who would dare to seize a tiger? Kl. 116.

Said of a dangerous undertaking.

194 عبارت کوتو بوله دسليسق

'Ibarat kutu bulih di-selisik.

"About as easy as squashing a flea."

i.e., A difficult operation.

195 عبارت نڬري براوبه رسم

'Ibarat negri ber-ubah răsam.

"Like a country which changes its customs."

FAVRE reads *rasan*, which he supposes to be a corruption of the Dutch *grenzen*, and translates it "frontier." This word is unknown to Malays whom I have questioned about it, so I have preferred to read *răsam*.

196 علم دان عقل دهالي بالي ايتله تندا اورڠيڠ لالي

'Ilmu dan 'akal di-halei-balei itu-lah tanda orang yang lalei.

"When science and learning are set at nought, you may know "by that sign that the man is heedless." Kl. 146.

197 ڤاته كمودي دڠن ابمڽ

Patah kamudi dengan abam-nia.

"The rudder is smashed along with the stern-post." Kl. 125.

i.e., All hope lost.

Abam—I don't know this word. "Boom"?

198 فارڠ ڬابوس منجادي سفرة فارڠ بسي

Parang gabus men-jadi saperti parang besi.

"A knife of soft wood has become like an iron one." MARSDEN.

i.e., A weak man may become strong, and a timid one courageous.

199 ڤاچت هندق منجادي اولرساوه

Pachat handak men-jadi ular sawah.

"The leech wants to become a boa-constrictor." Hk. Ab. 194.

Unreasonable aspiration. See *supra* No. 159, and M. 122.

Compare the fable of the frog and the bull.

200 ڤاڬر ماكن ڤادي

Pagar makan padi.

"The hedge (which ought to protect the rice) eats it." HANG TUAH.

See *supra* No. 78, and M. 115.

201 فانس ستاهن دهافسكن اوله هوجن سهاري

Panas sa'tahun di-hapus-kan uleh hujan sa'hari.

"A day's rain effaces a year's drought." Kl. 6.

A good character lost by some little fault.

202 فد تتکل ربوڠ تياد دڤاته کتيک سده منجادي اور اڤ کونڽ

Pada tatkala rebong tiada di-patah, katika sudah men-jadi awar apa guna-nia.

"The bamboo shoot must be broken off when it is young, "when it has grown tall what is the use of it (for food)?" Kl. 153.

The shoot of the large bamboo (*Bambusa arundinacea*) is highly esteemed by the Malays as a culinary vegetable, and in this stage of its growth, before it becomes too tough and fibrous, is called *rebong*. The plant when grown up is called *awar*.

Education must be begun when children are young. If put off till they are strong enough to resist, it will be too late.

This proverb will be found in FAVRE'S Dictionary under *ura*, which is translated *poussé, qui s'est étendu*. This is a mistake; the word is *awar*, which is identical with *hawar*.

203 فراهو فافن برموة انتن

Prahu papan ber-muat intan.

"A wooden boat laden with diamonds." Kl. 127.

A man of common exterior endowed with good qualities. A poor man married to a princess. Unsuitable.

204 ڤڠکر تمبڠ بلاتوق منمڤڠ ماتي

Punggor tumbang bĕlatok menumpang mati.

"The dead tree falls and the woodpecker perishes with it." Kl. 150.

The ruin of a great man often involves that of his dependants.

Cf. *Sirih naik junjong patah.* M. 107.

205 ڤچه کاڤي ڤوتس سواجي

Pechah kapi putus suwaji.

"The pulley smashes and down comes the tackle." Kl. 179.

One failure brings about another. See the preceding.

206 ڤلندقله لوفكن جرة تتافي جرة تياد ملوڤكن فلندق

Pĕlandok-lah lupa-kan jerat tatapi jerat tiada me-lupa-kan pĕlandok.

"The-mouse deer forgets the net, but the net does not forget "the mouse-deer." Kl. 126. Hk. Ab. 498.

The net of the law is always spread and the criminal is sure to be taken off his guard sooner or later. See Journal, Straits Branch R. A. S., No. 9, p. 51.

207 ڤنتون هلڠ دڠن ايم لمبت لاون دسمبر جوڬ

Pantan halang dengan hayam lambat lawan di-sambar juga.

"Like the hawk and the fowl, however long the struggle it "ends in capture."

Pantan=saperti, laksana.

An unequal combat; the more powerful is sure to carry out his object.

208 فپو اية برتلور٢ بربو٢ سوُرڠفون تياد تاهو ايم برتلور سبجيءُ ڤچه سبوه نكري

Penyu itu ber-tĕlor-tĕlor ber-ribu-ribu sa'orang-pun tiada tahu, ayam ber-telor sa'biji pechah sa'buah negri.

"The turtle lays thousands of eggs and no one knows any "thing about it, a hen lays an egg and the whole country rings "with the noise." Kl. 23.

"Great cry and little wool."

209 ڤوتڠ هيدڠ روسق موگ

Potong hidong rosak muka.

"If the nose is cut off the face is disfigured." Kl. 52.

A whole family is affected by the disgrace of a single member of it.

210 ڤوتسله تمبا تڠڬل تالي

Putus-lah timba tinggal tali.

"The bucket has fallen off, and the cord is left in the hand."

Said when an enterprise has failed and its promoters are left with the materials they provided for it, which are now useless. See M. 213.

211 ڤوكل انق سندير منتو

Pukul anak sindir menantu.

"To strike the daughter in order to vex the son-in-law."

To aim an indirect injury.

To say something to a person intending that it shall apply to some one else within hearing.

212 فيجة٢ فون تله منجادي كورا٢

Pijat-pijat pun telah men-jadi kora-kora.

"Bugs have become tortoises." Kl. 89. Hk. Ab. 4.

Said of the inhabitants of a country who have prospered.

See *supra* No. 66.

213 كاڤق نايك ڤميدڠ

Kapak naik pemidang.

"The axe mounts the loom" (undertakes weaving).

Unsuitable, incompatible. "A beggar on horseback."

The popular phrase as I have heard it in Perak is: *Kapak masok meminang.* See M. 219.

Is this a different version, or is not *pemidang* a mistake for *meminang?*

214 كڤل ساتو نخودا دوا

Kapal satu nakhodah dua.

"One ship and two captains." Kl. 130.

"Too many cooks spoil the broth."

215 كلدي هندق دجاديكنڽ كودا

Kaldei handak di-jadi-kan-nia kuda.

"He wants to make an ass into a horse." Hk. Ab. 173.

You cannot make a silk purse out of a sow's ear.

Cf. *Pachat handak men-jadi ular sawah.* No. 199.

The ass is but little known to the Malays, so phrases in which this animal is introduced as an illustration are likely to be of foreign origin.

216 كالو تياد اڠين تاءكن ڤوكوء برڬويڠ

Kalau tiada angin ta'kan pokok ber-goyang.

"If there is no wind the trees do not rock."

"There is no smoke without fire." A man would not act in a particular way if there were not some one "pulling the strings."

Cf. *Ta'tumboh ta'me-lata.*
Ta'sunggoh orang ta'kata. M. 41.

217 كالو كربو سكندڠ داڤة دكاولكن مانسي سوءرڠ تياد داڤة دمعلومكن

Kalau kerbau sa'kandang dapat di-kawal-kan, manusia sa'orang tiada dapat di-m'alum-kan.

"Though a herd of buffaloes may be successfully guarded, a "single human being (a woman) is not to be understood." Kl. 171.

See M. 148.

"Car, voyez vous, la femme est, comme on dit, mon maitre,
Un certain animal, difficile à connaitre." MOLIERE.

218 كالو كنا تمفر بير دڠن تاڠن يڠ فاكي چنچين كالو كنا تندڠ بير دڠن كاكي يڠ فاكي كاسوت

Kalau kena tampar biar dengan tangan yang pakei chinchin,
kalau kena tendang biar dengan kaki yang pakei kasut.

"If you receive a slap let it be from a hand which wears a "ring, if you receive a kick let it be with a foot which wears a "shoe." Kl. 9.

Let correction or punishment come from some one of superior rank. This proverb is, I believe, borrowed from the Tamil language.

219 كالو كوچيڠ فاكي تندق هلندا ماسق اسلام بهارو بوله جادي

Kalau kuching pakei tandok wolanda masok islam baharu bulih jadi.

"When cats wear horns and Dutchmen turn Muhammadans it "will come to pass."

This is a common expression (modern), but it is rather an imprecation than a proverb. Another version is: *Ber-tandok kuda*, "when horses have horns." "The Greek kalends."

220 كالو لاڠيت هندق منمقه بومي بولهكه دتاهنكن دڠن تلنجوق

Kalau langit handak menimpah bumi buleh-kah di-tahan-kan
dengan telunjuk.

"If the sky were about to fall on the earth, could one keep it "off with the forefinger?" Kl. 12.

Can the oppression of a raja or chief be successfully resisted by one in a humble position?

221 كالو مڽبرڠ سوڠي بير دتلن اوله بواي تتافي جاڠنله دفاڬوة اوله ايكن كچيل٢

Kalau menyabĕrang sungei biar di-telan uleh buaya tetapi jangan-
lah di-pagut uleh ikan kĕchil-kĕchil.

"If you are crossing a river, rather be swallowed by a "crocodile than nibbled at by the little fishes." Kl. 11.

Death at the hands of a fitting antagonist is better than insults from mean and vulgar adversaries.

222 كايو دكتاكن باتو دان لاڠيت هندق دچاڤي دڠن تاڠن

Kayu di-kata-kan batu dan langit handak di-chapei dengan tangan.

“To call wood stone, and to attempt to reach the sky with the “hand.” Kl. 129.

Foolish and extravagant pretensions. “All his geese are swans.”

223 كتم مپورهكن انقڽ برجالن بتول

Ketam menyuroh-kan anak-nia ber-jalan betul.

“The crab tells its young ones to go straight.”

“The devil who preaches penitence.” I don’t know where FAVRE got this; it seems to argue an acquaintance, on the part of the Malays, with Æsop’s fables.

224 كربو ڤوڽ سوسو ساڤي ڤوڽ نام

Kerbau punya susu sapi punya nama.

“The buffalo’s milk goes by the cow’s name.” Kl. 19. Hk. Ab. 381.

One does the work and another gets the credit.

The Perak Malays say: *Hilang jasa bĕliong timbul jasa rimbas.* “The work of the axe is forgotten and only that of the plane is thought of.”

225 كمان تومڤهكن كواه كالو تيدق كناسي

Kamana tumpah-kan kuah kalau tidak ka nasi.

“Where is the gravy to be poured if not on the rice?” Kl. 148.

Compare. *Ayer di tulang bumbung-an kamana turun-nia kalau tiada chuchur-an atap?*

“How does the water on the ridge of the roof find its way down except by the channels of the thatch?”

A child follows his father’s example and teaching. If he were not to do so, where else should he look for a guide?

226 كوچيڠ ملومڤة اورڠ تركجوت درفد تيدرڽ ايم بركوكوء هاريڤون سيڠ

Kuching me-lompat orang ter-kejut deri-pada tidor-nia hayam ber-kukuk hari pun siang.

“The cat jumps, the man starts up from sleep, the cock crows “and the dawn appears.” Hk. Ab. 245.

Quoted *à propos* of breaking off some work or enterprise because an incident occurs which suggests a better course. What was being done is given up, and one starts on a fresh tack.

227 کورڠ٢ بوبر لبه٢ سودو

Korang-korang bubur lebih-lebih sudu.

"The less porridge the more spoons." Kl. 60.

The more trifling it is, the more fuss is made about it. "Great cry and little wool." "To make a mountain out of a molehill."

228 كولية بابي يڠترسوڠکوء دکڤلا اورڠ

Kulit babi yang ter-songkok di-kapala orang.

"The pig's skin stuck on a man's head as a cap." Hk. Ab. 360.

Figurative mode of describing a deadly insult. Cf. *Arang ber-chonting di-muka.* Sajarah Malayu, 178. See M. No. 3.

229 ݢاجه دتلن اولر ليدي

Gajah di-telan ular lidi.

"The whip-snake has swallowed the elephant."

The greater has been conquered by the less.

230 ݢاجه سما ݢاجه برجواڠ ڤلندق ماتي دتڠه٢

Gajah sama gajah ber-juwang pĕlandok mati di tengah-tengah.

"Two elephants meet in combat and the mouse-deer between "them is killed." Kl. 29.

Keep out of the quarrels of the powerful or you may chance to be ruined without any fault of your own.

231 ݢارم تومڤه افکه تمڤتڽ

Garam tumpah apa-kah tampat-nia.

"If salt is spilt what is its place?"

Who will take the trouble to pick it up and put it back again? Who can tell what the ultimate fate will be of one who has "gone to the dogs?"

232 ݢته تربڠکيت کواران تيبا

Gĕtah ter-bangket kuaran tiba.

"When the snare has been taken up, the pigeons arrive." Kl. 32.

"Too late for the fair." Guests have come when the feast is over. *Kuaran* are green pigeons like *punei.*

Klinkert and Favre have exhausted much ingenuity over this proverb without getting hold of the right text. They have *geta*, a bedstead, for *gĕtah*, bird-lime, and could get no translation of *kuaran.* They have *di-angkat* for *ter-bangket*, but this is immaterial.

233 كورو كنچيڠ برديري انق موريد كنچيڠ برلاري

Guru kinching ber-diri anak murid kinching ber-lari.

"If the master does what is unseemly the school-boys will do "much worse." Kl. 149.

Inculcates the danger of a bad example to the young. Those who understand Malay will probably know what is the native custom the breach of which is alluded to in the proverb. KLINKERT and FAVRE have quite missed the meaning as they have *kinchang* which does not make sense.

234 لاڠية بركليكير بومي برتمبيرڠ ساله٢ ڤيكر منجادي همب اورڠ

Langit ber-kelikir, bumi ber-tĕmbirang.
Salah-salah pikir menjadi hamba orang.

"The heavens are in a ring and the earth is held by stays;
"Want of sense makes a man the slave of others." Kl. 147.

Kelikir=a ring of rattan or cord; *tĕmbirang*=shrouds, stays, rigging.

The first line (after the manner of Malay *pantuns*) is not intended to have any special meaning.

235 لايڠ٢ فوتس تاليپ

Layang-layang putus tali-nia.

"A kite of which the cord is broken." Kl. 132.

At the mercy of fortune. See M. 129 and 242.

236 لبه فوچق لبه ڤلفه

Lebih puchuk lebih palepah.

"The more shoots the more leaves."

The mutual support of the palm-shoot and fronds has been the subject of a previous proverb in this collection. See *supra* No. 173.

The meaning here is, the more you do for a man the more he will do for you.

237 لقسان ڤنچالڠ ترسارت تياد كتيمور تياد كبارت

Laksana penchalang ter-sarat tiada ka-timor tiada ka-barat.

"Like a waterlogged boat which will neither steer east nor "west (will not obey the helm)." Kl. 131.

In difficulties; not sure in what quarter to look for assistance.

238 لفس بنتل برݢنتي تيكر

Lepas bantal ber-ganti tikar.

"To put down the pillow and take a mat."

To replace a wife by marrying her sister, or to replace a husband by marrying his brother.

239 لمڤر باتو سمبوڽيكن تاڠن

Lempar batu sembunyi-kan tangan.

"To throw a stone while keeping the hand out of sight." Kl. 53.

Said of those who cause a thing to be done, but take measures to prevent its being known that they are the authors.

240 مات تيدر بنتل منجاݢ

Mata tidor bantal men-jaga.

"The eyes close in sleep, but the pillow remains awake." Kl. 141.

241 ماتي ݢاجه تياد دافت بلالي ماتي هريمو تياد دافة بلڠڽ

Mati gajah tiada dapat belalei, mati harimau tiada dapat bĕlang-nia.

"An elephant dies, but no one finds his trunk; a tiger dies, but "no one finds his stripes." Kl. 30.

Crime often goes undiscovered.

242 ماتيله كومن كنا فلنتيق سكلين عالم لمفه دارهڽ

Mati-lah kuman kena pĕlantik sa-kali-an 'alam limpah darah-nia.

"An insect is impaled and the whole world is smothered with "blood." Kl. 142.

"Great cry and little wool." *Pelantik*(in Perak *belantik*) is a spear-trap set for elephants, rhinoceros and other big game.

243 ماتي٢ مندي بير باسه ماتي٢ برداوة بيرله هيتم

Mati-mati mandi biar basah, mati-mati ber-dawat biar-lah hitam.

"Let that which is washed be thoroughly wet, and that which "is blackened be altogether black." Kl. 10.

"It is as well to be hanged for a sheep as for a lamb." See. M. 167.

244 ماكين باڽق اورڠ ماكين باڽق نية

Makin baniak orang makin baniak niat.

"As is the number of men, so will be the number of purposes."

Kl. 135. "Many men of many minds."

There are several proverbs of similar meaning :—

Lain dulang lain kaki ;
Lain orang lain hati.
"Different trays have different feet.
"Different men have different hearts."
Baniak udang baniak garam-nia;
Baniak orang baniak ragam-nia.
"Many shrimps, much salt ;
Many men, many whims."
Iyyâka na'budu wa iyyâka nasta 'în
Kapala sama buluh hati ber-lain-lain.

Here the first line is an Arabic text from the first chapter of the Koran, and is dragged in for the sake of the rhyme. Its meaning (unknown to the majority of Malays) is "Thee we worship, to thee we turn for help."

The second line, which contains the proverb, means, "Heads alike have hair, but hearts differ one from another."

245 مالو كالو انق هريمو منجادي انق كوچيڠ

Malu kalau anak harimau men-jadi anak kuching

"It is a shameful thing if a tiger-cub becomes a kitten."

See *supra* No. 21.

246 ماسق كدالم كندڠ كمبيڠ مڠمبيق ماسق كدالم كندڠ كربو مڠواء

Masok ka-dalam kandang kambing meng-embik masok ka-dalam kandang kerbau meng-uwak.

"To bleat with the sheep and low with the kine (buffaloes)."

Cf. "To run with the hare and hunt with the hounds."

247 مراب كسان كماري سڤرت اورڠ بوتا كهيلاڠن توڠكتڽ

Me-raba ka-sana ka-mari saperti orang buta ka-hilang-an tongkat-nia.

"Groping here and there like a blind man who has lost his "stick." Hk. Ab. 149.

248 ماٴنكم سده منجادي سكم

M'anikam sudah men-jadi sĕkam.

"The gem has become chaff." Sha'ir Bidasari, 103.

A fall in station. He who was formerly held up to admiration has fallen to insignificance.

There is a kind of play upon words in the conjunction of *m'anikam* and *sekam*, otherwise the connection between jewels and rice-chaff is not obvious. Compare *udang* and *orang*, *garam*, and *ragam*, in one of the examples given under No. 244.

249 مڠمباليكن ماٴنكم ايت كدالم چمبولن

Mengembalik-kan m'anikam itu ka-dalam chembul-nia.

"To put back the precious stone into its box." Kl. 133.

To reunite persons or things after an interval of separation.

This is apparently a passage from some Malay author with a figurative meaning; not a proverb.

250 ممباسهكن ارڠ يڠترچونتيڠ دموگ

Mem-basoh-kan arang yang ter-chonting di muka.

"To wash off the black with which one's face is smudged." Hk. Ab. 360.

To revenge one's self for an injury; to wipe out an affront received.

See *supra* No. 228.

251 ممبري بارڠ كڤد تاڠن كرا

Mem-bĕri barang kapada tangan kĕra.

"To give things to the monkeys."

i.e., to entrust property to some one who will waste it.

See *supra* No. 182.

252 ممبواڠ گارم كدالم لاوة

Mem-buang garam ka-dalam laut.

"To throw salt into the sea." Kl. 134.

To lose one's labour for nothing.

253 ممگڠ بسي ڤانس

Memegang besi panas.

"To hold a hot iron in the hand." Kl. 136.

Cf. *Genggam bara*, etc., *supra* No. 88.

254 ممنجت ڤوكوٴ چكوه بوله ماتي جاته

Memanjat pokok chekoh buleh mati jatoh.

“ In climbing a *chekoh* bush one may fall and be killed.”

To set about some insignificant or ridiculous undertaking as if one were doing something serious or in which there is danger.

255 منتيکن ناسي دساجيکن دلوتت

Menanti-kan nasi di-saji-kan di lutut.

“ To wait expecting that rice will be served at his knees.”

“ To imagine that the apples are going to drop into one's lap.”

“ Attendre que les alouettes tombent toutes roties.”

256 منيوڤ سوليڠ بربوڽي بڠسي مك بڠسي اية ترڤاته٢

Meniup suling ber-bunyi bangsi maka bangsi itu ter-patah-patah.

“ If when you blow into the fife, the pipe sounds, the pipe will “ soon break into pieces.”

A man has quite enough to do in minding his own business without undertaking that of his neighbours.

257 مهل دبلي سوكر دچاري

Mahal di-bĕli sukar di-chahari.

“ Expensive to purchase, difficult to obtain.” Kl. 137.

Not to be had at any price. See M. 288.

258 موات باوا مادو ڤنتت باوا سيڠة

Mulut bawa madu, pantat bawa singat.

“ The mouth brings honey and the tail carries a sting.” Kl. 155.

Said of plausible persons, who conceal beneath honied words a treacherous intention. See M. 188.

259 مولت دسواڤڽ ڤيسڠ ڤنتة دکايتڽ دڠن اونق

Mulut di-suap-nia pisang pantat di-kait-nia dengan unak.

“ The mouth is filled with plantains, while the back is hooked “ with a thorn.” Kl. 66. Hk. Ab. 237. Sajarah Malayu 339.

To deceive a person by pretence of friendship, while really working him an injury, or designing to extort something from him. See No. 258.

260 مينم اير سراس دوري

Minum ayer sa-rasa-duri.

"When drinking, there is a feeling as of thorns." Kl. 139.

Klinkert and Favre have *be-rasa* which is incorrect. See M. 174. "*Minum ayer sa-rasa duri, makan sa-rasa lilin tidor ta'lena, mandi ta'basah.*"

Divested of Oriental hyperbole, the sentence means "In my present state of mind I can enjoy nothing." Compare Lane's *Thousand and one Nights*, I, 341. "Verily from the time when I first saw thee, neither sleep has been sweet to me nor hath food been pleasant."

261 هابس اومڤن کيروڠ٢ تياد داڤت

Habis umpan kerung-kerung tiada dapat.

"The bait is all gone but no fish have been caught." Kl. 68.

Said of an undertaking which has failed; the money is all spent, but there is nothing to shew for it.

Cf. *Tuba binasa ikan ta'dapat.* M. 247.

Pelabor habis Palembang ta'alah. M. 116.

Kerung-kerung is a small fish caught in the sea, with hard scales like those of the *ikan batu*, very cheap and inferior.

262 هارڤکن انق بوتا مات سبله هارفکن تمن بوتا مات کدواپ

Harap-kan anak buta mata sa-bĕlah, harap-kan tĕman buta ka-dua-nia.

"To trust in one's child is to be blind of an eye, but to put "confidence in a slave is to be blind altogether." Kl. 25.

263 هارفکن ڬنتور دلاڠية اير دتمڤاين دچورهکن

Harap-kan guntur di langit ayer di tampayan di-chorah-kan.

"To empty one's water-jar through faith in the thunder in the "heavens." Kl. 4.

"A bird in the hand is worth two in the bush" and a full water-butt is better than all the rain-clouds in the sky, in spite of thunder, which is not always a sure sign of rain. In Perak they say *ura-kan* for *chorah-kan.*

264 هاروم مڠهيلڠکن باو

Harum meng-hilang-kan bau.

"A sweet scent overcomes a disagreeable smell."

Kind treatment will obliterate the memory of injustice

265 هريمو ماتي منڠݢلكن بلڠ ݢاجه ماتي منڠݢلكن تولڠ

Harimau mati meninggal-kan bĕlang gajah mati meninggal-kan tulang.

"When a tiger dies he leaves behind him his striped skin, when "an elephant dies he leaves his bones." Kl. 143. Hk. Ab. 109.

Manusia mati meninggal-kan nama.

A man is judged after his death according to the good or bad name which he leaves behind him.

266 هندقله سڤرت تمبيكر ڤچه ساتو ڤچه سمواپ

Handak-lah saperti tembikar pechah satu pechah samua-nia.

"To emulate the fate of porcelain, if one piece is smashed all "goes."

Said of fidelity between friends. To share good and evil fortune together. See M. 67, 197 and 263.

267 هوتڠ امس داڤة دباير هوتڠ بودي دباوا ماتي

Hutang amas dapat di-bayar hutang budi di-bawa mati.

(Sometimes *kasih* instead of *budi.*)

"Debts of money may be paid, but a debt of gratitude must "be carried to the grave." Kl. 144. Hk. Ab. 167.

268 هوجن برباليق كلاڠية

Hujan ber-balik ka-langit.

"Rain returning to the sky." Kl. 13. Hk. Ab. 137.

To reverse the order of things. "To teach one's grandmother to suck eggs."
"Gros Jean qui veut en montrer à son curé."
"To put the cart before the horse."
"To carry coals to Newcastle."

269 هيدڠ تاءمنچوڠ ڤيڤي ترسورڠ٢

Hidong ta'munchong pipi ter-sorong-sorong.

"The nose is not prominent, but the cheeks push themselves "forward." Kl. 182.

Said of a busybody.

The person really concerned is passive, but some one who has nothing to do with it "shoves his oar in," *e. g.*, an outsider who takes up a quarrel when the relations of the disputants are content to let it drop. KLINKERT and FAVRE have failed to get the right meaning of this phrase.

270 هيلڠ بيني بوله دچهاري هيلڠ بودي بدن چلاک

Hilang bini bulih di-chahari, hilang budi badan chelaka.

"A lost wife may be replaced, but if character is lost the body "is ruined." Kl. 145.

271 يڠ اڠکڠ ايت سما اڠکڠ جوڭ دان يڠ فاتوت اية سما فاتوت جوڭ

Yang enggang itu amas enggang juga, dan yang patut itu sama patut juga.

"The hornbill with the hornbill and each with what suits it." "Like to like." See *supra* No. 6.

272 يڠدکجر تياد دافت دان يڠدکندوڠ برچيچيران

Yang di-kejar tiada dapat dan yang di-kandong ber-chichir-an.

"He did not get what he was running after and dropped his "purse into the bargain." Kl. 3. Kal. & Dam. 84.

The substance is better than the shadow and it is idiotic to lose the former in an attempt to get the latter. *Duos qui sequitur lepores neutrum capit.*

The Perak version is: *Di-terkam ta'dapat, yang di-kandong ber-chichir.*

Yang di-kandong, lit., "that which is carried at the waist" *i.e.*, money or valuables carried in a belt or in a fold of a *sarong.*

This is the usual Malay substitute for a purse; the contents are somewhat liable to fall out if the dress is disarranged in running or fighting, &c.

The sentences which have been omitted will be found in FAVRE'S Dictionary (Malais-Français) under the following words:—*Kuda* (compare M. No. 185); *kudong; kudis; gajah; gali (* see M. No. 58.*); geruk; tumpul; tumbuh; tembikar; teriak; dengar; nali; pukul; palita; buku; burong; mamah; likas; lintah;* and *sungei.*

I take the opportunity here of acknowledging the assistance given to me in preparing this paper for the press by Munshi MUHAMMAD SA'ID, Singapore, and Munshi MUHAMMAD J'AFAR, Malacca.

W. E. M.

THE PIGMIES

OF

HOMER, HERODOTUS, ARISTOTLE, PLINY, ETC.;

THE ASIATIC PIGMIES, OR NEGRITOS;

THE NEGRILLOS, OR AFRICAN PIGMIES.*

BY

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TRANSLATED BY

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I.

THERE is probably no nation, no tribe of the human race, that has not believed in the existence of men of a stature more or less diminutive, and that has not made them play a part in its legends. One knows that the Greeks did not escape the common law, and that HOMER has borrowed from traditions, which were no doubt of a date anterior to himself, the beginning of the third chapter of the Iliad:—

" When by their sev'ral chiefs the troops were rang'd
" With noise and clamour, as a flight of birds,
" The men of Troy advanced; as when the cranes,
" Flying the wintry storms, send forth on high

---

* This paper was published in the *Journal des Savants, Février, 1881*, and *Juin, 1882.*

" Their dissonant clamours, while o'er the Ocean stream,
" They steer their course and, on their pinions, bear
" Battle and death to the Pygmœan race." (1)

The land of the Pigmies is not mentioned in this passage. HOMER, however, was certainly acquainted with the migrations of the cranes; he knew that they pass every year from Europe to Africa and *vice versâ;* (2) and as these birds only meet their enemies after having crossed the sea in order to escape the severity of the winter, it is evident that it is some place in Africa that the poet has fixed as the abode of these dwarfs supposed to be too small and feeble to resist the attack of their winged invaders.

Although ARISTOTLE speaks of the Pigmies with regard to the natural history of cranes, yet he says nothing of the supposed combats which have furnished HOMER with his illustration. It may be asserted that he did not believe it. This is what he says: " The " cranes pass from the plains of Scythia to the marshes of Upper " Egypt, near the source of the Nile. This is the district which " is inhabited by the Pigmies, the existence of whom is no fable. " They are really, as has been reported, a race of men of small " stature, and their horses are small also. They spend their life " in caverns." *(History of Animals.)*

Though not as explicit as might be desired, ARISTOTLE here dispenses with the exaggerations about the small size of the Pigmies, for there is a great difference between *men of small stature,* as he styles them, and miniature human beings among whom cranes are able to *bear battle and death.* In other respects, the founder of Natural Sciences may be said to have been on the track of what appears to us at the present day to be the truth.

He places the habitat of the Pigmies near the sources of the Nile, and, in fact, it was when travelling in the general direction of that river that SCHWEINFURTH discovered the race of diminutive men of whom we shall speak later on. However, ARISTOTLE places these sources amongst the marshes of Upper Egypt. We know now, but only within the last few years, that an hypothesis of that kind would singularly shorten the course of the Nile. These marshes exist in reality. All travellers in those regions have dwelt on the difficulties they experienced in getting across the inextricable labyrinth of channels obstructed by islets, sometimes fixed and sometimes floating, which form the *Sett*, a real vegetable barrier, of which papyrus (1) and ambatch (2) form, so to speak, the framework, and which humbler plants, more especially the *Pistia stratiotes* (Linn.)—compared, by travellers to a small cabbage growing something after the fashion of our duck-weed—serve to consolidate.

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(1) Translation of the Earl of DERBY, p. 81.

(2) As BUFFON rightly remarks, it is these alternate migrations, in opposite directions, which caused the ancients to call the crane "*the Bird of Lybia*" as well as "*the Bird of Scythia.*" (BUFFON—*History of Birds; the Crane.*)

But these swamps, which begin a little to the south of Khartoum, become more defined towards the 9th degree of north latitude, and cease entirely before reaching Gondokoro, about the 7th degree. (3) It is known that the Nile takes its source much further from, and south of, the Equator. It was in our hemisphere, close to the 2nd degree of north latitude, at two or three degrees west of the great African river, and in a totally different watershed (that of the Ouellé) that Schweinfurth discovered the Akkas, (4) who are evidently the small men of Aristotle.

The latter mentions also the *small horses* of the Pigmies, yet no traveller has ever referred to this quadruped as forming part of the fauna of the country. One might feel inclined to find in this contradiction a motive for doubting the accuracy of the information furnished to the Greek philosopher by the travellers of his time, but an explanation can easily be given. Baker speaks of the very small proportions of the cattle of the Baris, a negro tribe in the vicinity of Gondokoro. "Cows and sheep," says he, (¹) "are of lilliputian size." It may be that, at the time of the Egyptian domination, the horse reached those regions, and if so it must have undergone there the degeneracy noticed by the English traveller with reference to the other domestic animals.

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(1) *Papyrus domestica.* (Linn.) This deservedly celebrated plant seems to have been formerly abundant all over Egypt. In his *Lettres sur l'Egypte*, Savary certifies to having seen it still in a forest near Damietta (Poiret—*Dictionnaire des Sciences Naturelles, Art. Papyrus).* Yet Schweinfurth saw it for the first time on the banks of the Nile at 9° 30' north latitude. *(Au cœur de l'Afrique*, p. 97. *)*

(2) *Herminieria* (Adamson) ; *Ædemone mirabilis* (Kotschy). This plant, which grows 15 and 20 feet high and has a diameter of 5 to 6 centimètres at the base, is remarkable for the very low density of its wood. It is much lighter than cork, and a man can carry on his back a raft capable of bearing eight people.

(3) *Discovery of the Albert N'yanza. New Explorations to the Source of the Nile*, by Sir Samuel Baker.

(4) *Au cœur de l'Afrique*, vol. II, *passim.*

Thus, ARISTOTLE is very positive ; what he says is partly accurate and at any rate reasonable. With PLINY we fall back into uncertainty, exaggerations and fables. He places the Pigmies, sometimes in Thrace, not far from the coast of the Euxine, (²) and at other times in Asia Minor, in the interior of Caria. (³) Twice he points to India as being the native land of these little creatures, (⁴) and elsewhere again, in speaking of the African races who live on the extreme boundary of Ethiopia, he says : "some authors have also "stated that the Pigmy nation exists in the marshes where the "Nile takes its rise." (⁵) PLINY, moreover, reproduces, without any reservation, all the stories about their battles with the cranes. It is these latter which, according to the Barbarians, expelled the Pigmies from Thrace ; (⁶) thanks to the annual migration of these birds, the dwarfs have the advantage of a truce every year. (⁷) Lastly, in a rather long passage, he sums up the different reports in the following terms : "In India, beyond the mountains (those "situated at the vernal equinox) people speak of Trispithames "and Pigmies who do not stand higher than three spithames (27 "inches). Protected as they are by their mountains from the "north wind, they enjoy a fine climate and a perpetual spring. "HOMER relates, on his part, that the cranes rage war against "them. It is also reported that, riding rams and goats, and "armed with arrows, they all go down together in the spring to the "shores of sea and there eat the eggs and young ones of these "birds ; that this expedition lasts for three months ; that otherwise "they would be unable to resist the increasing multitude of the

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(¹) *Discovery of the Albert N'yanza, etc.*
(²) *Histoire Naturelle*—Translation of LITTRE, vol. I, p. 191*a*.
(³) Loc. cit., p. 227b.
(⁴) Loc. cit., p 250b and 283b.
(⁵) PLINY, p. 271a.
(⁶) Loc. cit., p. 191a.
(⁷) Loc. cit., p. 411a.

“ cranes; that their huts are made of mud, feathers and egg-shells. “ Aristotle says that the Pigmies live in caverns, in other res- “ pects he gives the same particulars as other writers.” (1)

Pliny is not the only ancient author who has written about Asiatic Pigmies; they have also been mentioned by Ctesias: “ There exists,” says he, “ in the middle of India, a race of black men “ called Pigmies. They speak the same language as the Indians, “ and are very small; the tallest men among them are two cubits “ high, the greater number being only one and-a-half. Their hair “ is very long and comes down to their knees and even lower. “ They have a longer beard than any other men; when it is full “ grown, they do away with their clothes, their hair and beard “ being quite sufficient to cover them. They are flat-nosed and “ ugly .... They are very skilful in the use of the bow and “ arrow.” (2) Truth and fable are mingled in this description as in many others less ancient. There is decidedly nothing true in what Ctesias says about the hair and beard of these Pigmies; but we perhaps find there another example of a mistake caused sometimes by the nature of the garments worn by imperfectly known populations. These prodigious beards and long hair were no doubt mantles and girdles made of long grass. (3)

It is evident that the Greek physician has also reduced, in a fabulous proportion, the size of his miniature Indians; just, in fact, as Pigafetta exaggerated, in a strange manner, the height of the Patagonians. Nobody would doubt the fact that Magellan and his companions were in contact with the men seen by d'Urville, d'Orbigny and Musters, whose true proportions they have given us, and who still continue to be the tallest men on this globe.

The exaggerations uttered by Ctesias must not prevent us either from acknowledging that the smallest race of India was known in his time and that it is the one he referred to.

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(1) Pliny, Loc. cit., p. 283b.

(2) *History of India by Ctésias. Extracts of Photius*, which follow the translation of Herodotus, by Larcher, vol. VI, § XI.

(3) Even at the present day, in the neighbourhood of Travancore, women wear no other garments. *(Traditionary Origin of Grass Aprons; Journal of the Anthropological Institute*, vol. XI, p. 356). With reference to this, I will recall the mistake that has caused the revival of the fable of *men with tails* applied to the Niams-Niams.

Some of the particulars given by him are true to this day, and we are, moreover, indebted to him for a valuable piece of information. He is the only one of all ancient writers who, in speaking of Pigmies, assigns to them a black complexion. We are perfectly aware at present that this characteristic is found, to a high degree, among the Negritos, and is persistent in Dravidians, even when strongly modified by cross-breeding.

Ctesias also tells us that Pigmies are *flat-nosed and ugly*, a description which is entirely confirmed by M. Rousselet's portrait of a Djambal and by photographs taken by M. Brau de St. Pol-Lias. He adds that they are skilful in archery; well, we all know that from the Philippine to the Andaman Islands, the bow is a formidable weapon in the hands of the Negritos. On the whole, we may infer that Ctesias really referred to the Negritos or to a closely allied race.

We saw just now that Pliny's assertion touching the opinion of Aristotle was inexact, and there is no need to insist on that point; but the accounts collected by the celebrated Roman compiler suggest other remarks. It is difficult to understand what made him place the Pigmies in Thrace or Asia Minor; in these countries, the history of man does not, any more than that of animals, furnish any fact which, disguised by ignorance or love of the marvellous, could have served as a basis for the legends under remark. Perhaps, as M. Maury has justly remarked, the explanation of these errors might be found in a general fact. The abode of the more or less extraordinary beings, whose existence was admitted by the ancients, was always placed by them in the remotest borders of the known world, without much concern for any precise spot or definite direction. It is from this that arise, in dealing with this fancy geography, the uncertainty and discrepancies so often noticed, and of which the history of the Pigmies affords a striking example.

Differing altogether from the countries to which the preceding remarks apply, tropical Africa and Asia present certain facts which permit the explanation, in different ways, of what the ancients said of their Pigmies, and these facts belong to the history of animals as well as to that of man.

In his *History of Birds*, and *à propos* of that of the crane, BUFFON has discussed the general bearing of the data which I have just reviewed in order to ascertain what truth there might be in them. But he leaves ARISTOTLE a little too much on one side, and attaches himself really to PLINY's assertions only. Referring what the Roman naturalist says about the annual expedition of the Pigmies to certain habits attributed to monkeys, he sees in the latter the famous dwarfs of antiquity: "It is known," says he, "that monkeys, which go about in large troops in most parts of "Africa and India, are in the habit of carrying on a perpetual "war against birds; they try to surprise their nests and are constantly laying snares to catch them. When the cranes arrive, "they find these enemies, assembled perhaps in large numbers in "order to attack this new and rich booty with the greater advantage. The birds, confident in their strength, pretty well experienced by continual fighting among themselves, and naturally "disposed to it, make a vigorous defence. But the monkeys, furiously bent upon carrying away the eggs and young ones, come "back constantly in bands to the attack; and, as by their tricks, "antics and attitudes, they seem to imitate human actions, they "have been taken by ignorant people to be an army of little men "......... This is the origin and history of these fables." (¹)

This interpretation of the old legend is simple and natural, and must have struck the attention of many. Supported by the authority of our great naturalist, it has generally been adopted. Perhaps it may still be looked upon as presenting a certain amount of truth. It may have happened, that under the influence of generally accepted beliefs, some travellers have really taken a troop of monkeys for a tribe of genuine Pigmies.

But has not man himself furnished his share of the data, true in the main and only misrepresented, for these legends, which have been handed down since HOMER? One of our colleagues, M. ROULIN, whom we have all so highly appreciated, as much for his personal character as for the soundness and diversity of his knowledge, is perhaps the first who originated this interpretation. Unfortunate-

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(¹) *Œuvres complètes de Buffon*—Edition revised by Mr. A. RICHARD, Professor at the Faculty of Medicine of Paris, vol. XIX, p. 337.

ly, the marginal notes made by him on a copy of PLINY belonging to the Institute Library, are evidently of very old date. In all probability, they were written long before the discoveries of which I shall have to speak hereafter. (1) In fact, the most valuable and accurate information that has reached us, has come since his death (1873) ; he was consequently unable to make use of it, to throw a light on the statement of the author on whom he commented.

Although we cannot now-a-days accept the hypothesis at which be arrived, I will nevertheless say a few words about it ; it is always interesting to know what has been the opinion, on a difficult subject, of a mind not only ingenious and keen in itself, but supported by extensive and varied learning.

For ROULIN, at the time he wrote his remarks, the Pigmies of the ancients were our circumpolar populations. Although his annotations do not actually say so, yet it is beyond doubt that the small stature of several of these tribes must have been the starting point of this interpretation. It is well known that the Laplanders were, for a long time, regarded as the smallest race on earth ; certain Esquimaux vie with them in this respect, and are even smaller. (2) From this, to see in them the dwarfs of the old legend, is but one step.

As for the question of abode, it could not stop ROULIN. Have not the Pigmies been placed in Thrace and Scythia as well as in Asia and Africa ? Moreover, certain peculiarities of custom render the identification still more complete. The writer reminds us that, like PLINY's dwarfs, some of the northern populations live alternately, during the year, on the seaside and inland; it is also for the special purpose of eating the eggs of aquatic birds, of which they destroy an immense number, that these tribes emigrate to the coast.

As for the statement made by the Roman writer with regard to the Pigmies' huts, it might easily be explained : "It may be," says ROULIN, "that, in the original tradition, these huts, instead of "being built of mud and egg-shells, were simply made of earth

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(1) These notes are written in pencil. The writing is very laboured and in many places almost rubbed out.

(2) I shall have occasion, later on, to give comparative figures of some of these small races.

" and egg-shaped. The Esquimaux huts assume that very shape, " but are of snow."

Lastly, tradition says that the cranes meet their enemies during their annual journey from north to south. To this, ROULIN replies: " Taking for granted that the migration of cranes takes place " between the same limits, but placing these in the swamps of Up- " per Egypt on one side, and in Scythia, that is, close to the glacial " zone, on the other, we see that it is in the latter region that the " Pigmies ought really to be found."

It is now useless to discuss ROULIN's corrections, however ingenious they may be. I shall confine myself to remarking that he has neglected another passage of PLINY, a passage all the more important inasmuch as it allows us to ascertain with precision the exact point where the great naturalist placed his Asiatic dwarfs. In his description of India, we read the following: " Immediate- " ly beyond the country inhabited by the Prusians, and in the " mountains where the Pigmies are reported to live, is the In- " dus." (1) The mountains in question were thus to the west of the river, and as the Pigmies resorted every year to the seaside, they could not possibly have lived very far inland; they must consequently have inhabited the most southerly portion of the hilly region of Beloochistan. This region is situated towards the 25th and 26th degrees north latitude and 63° and 64° east longitude. Travellers have never pointed out any people of exceptionally small stature in these parts, but by advancing a little further, about two degrees more south and 25 or 26 degrees to the east, one finds, amongst the Vindhya hills, the *Bandra-Lokhs*, who were re-discovered by ROUSSELET. (2)

The name of this tribe literally means *men-monkeys;* they are negroes of very small stature isolated amidst totally different races which present specimens of a complete group of continental populations, quite worthy of causing a special chapter to be added to the *History of Pigmies*. We shall study them more closely later on.

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(1) PLINY—*Loc. cit.*, p. 250b.

(2) *Note sur un Hô Autochthone des Forêts de l'Inde Centrale*—by M. LOUIS ROUSSELET, an Appendix to my paper called *Etude sur les Mincopies et la Race Négrito en général* (*Revue d'Anthropologie*, vol. I, p. 245); and *Note sur un Négrito de l'Inde Centrale* (*Bulletin de la Société d'Anthropologie*, 2nd series, vol. VII, p. 619). An English traveller had already spoken of these Bandra-Lokhs or Bandar-Lokhs; but what he had said about them still allowed strong doubts on the subject to be entertained.

We will not insist at present on facts which we shall have to return to and discuss; what I have just said is sufficient, I think, to show that ROULIN's theory is not supported, at least in the application he made of it. We are entitled to think that, had our loyal colleague lived, he would have given it up of his own accord and without the slightest hesitation, all the more in that the fundamental part of his supposition remains true as well for Asia as for Africa. The former has also its races of dwarfs, and their being imperfectly known has, without doubt, caused legends to be applied to them which originated in the latter continent. However, in both cases similar facts have presented themselves. ARISTOTLE placed his African Pigmies—the Akkas—too far north; PLINY put his Asiatic dwarfs a great deal too much to the west, or rather to the west-north-west, whether he meant insular tribes like the Mincopies, or some closely related tribes which had remained on the continent such as the *Bandra-Lokhs* and others. Moreover, neither the Greek philosopher nor the Roman naturalist mentions the black complexion or the woolly hair of the dwarfs they speak of by hearsay. The recollection of these peculiarities was evidently lost during the long journey which the intelligence, probably scanty enough, had to make from the heart of Africa, or the extremity of India, before reaching Greece or Rome. Such an omission is strange enough when it relaties to the colour of the skin, but it is less singular when it concerns the nature of the hair, for we know that the ancients simply attributed the woolly aspect of the negro's head to the heat of the sun and its crisping effect on the hair.

A contemporary of PLINY—POMPONIUS MELA—has also spoken of Pigmies. The passage he devotes to them, though very short, is nevertheless interesting. He places beyond the Arabian gulf, though in a small recess of the Red Sea, the Panchians, also called Ophiophagi, from their habit of eating snakes. He adds: "In the interior "of the country was seen, in olden times, a race of very small "men—the Pigmies—who became extinct in the constant wars "they had to wage against the cranes, in order to save their "fruit." (¹)

The translator of POMPONIUS MELA looks upon the *small recess in the Red Sea,* here above-mentioned, as being our present Gulf of Aden; but I should hardly fancy that the Latin geographer would have applied that expression to the vast expanse of water which extends from Cape Guardafui to the Straits of Bab-el-Mandeb. The Bay of Moscha, which penetrates far inland south-west of the straits, seems to correspond much better, in every respect, to the indication given by POMPONIUS. On the other hand, this bay is situated on the same parallel (13° N. lat.) as the commencement of the grassy region of the Nile, (²) but at about four degrees further north than the labyrinth from whence the river seems to spring. POMPONIUS does not mention the Nile; he says nothing either of the Abyssinian mountains between the African stream and the sea; he appears, therefore, to place his Pigmies on the very eastern shores of that part of the continent.

With PLINY, POMPONIUS accepts the fable as to the cranes, and the consequent exaggeration as to the small size of their antagonists; but he differs from his fellow countryman in one important point, since he accepts the extinction of the dwarf race. What he says on that subject may perhaps have resulted from a greater knowledge of those countries—knowledge which must have done away with the old legends. There may be, however, in his account, a substratum of truth, as we shall see further on.

In speaking of these famous dwarfs of the ancients, I had to dwell first on those whom HOMER immortalised and who were placed either in Asia or in the north-eastern regions of Africa; but, a century before ARISTOTLE, HERODOTUS had also mentioned a race of Pigmies, though he did not apply that actual name to them.

We are indebted to him for having handed down to us an account

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(1) *Collection des Auteurs Latins, traduits sous la direction de* M. NISARD, p. 658b.

(2) BAKER was stopped, for the first time, by the floating islands, eleven days only after having left Khartoum. The journey from the latter place to Gondokoro lasted forty-four days.

given to him by Cyrenian pilgrims, who had themselves received the information from Etearchus, King of the Ammonians. The latter told them that a certain number of young Nasamons had taken it into their heads to explore the desert of Lybia. Five of them, chosen by lot, started with provisions and water: "They first crossed "the inhabited region, then the wild country, after which they "reached the desert and followed a westerly course. After having "travelled in deep sand for many days, they at last perceived "trees growing in a field, and approaching picked some of the "fruits; but they had hardly begun eating them when a large "number of men, much below the average height, came down on "them and carried them away. They spoke a language unknown "to the Nasamons, and did not understand theirs. These men "led them across a marshy country to a town inhabited by black "people; near this town a large river flowed, from west to east, "and contained crocodiles." (1)

Although this account is rather brief, yet it agrees too well with our modern discoveries for us to doubt the truth of it. We know that the geographical zones pointed out by the Nasamons are still to be found. The river they discovered is the Djoliba, or Niger, which was successively taken for the Nile itself, or an affluent of Lake Tchad, until Mungo-Park, Caillé, Clapperton, the Lander brothers, &c., aquainted us with its real course. We know also that this stream, the source of which has lately been discovered by two young Frenchmen, rises in a ramification of the inland mountain-chain which runs parallel to the north coast of the Guinea Gulf. Although Messrs. Zweifel and Moustier (2) were unable, for want of proper instruments, to determine the exact position of *Mount Tembi* from which the Niger (¹) flows, and although they were only allowed to look at it at a distance, owing to local superstition, yet we can see by their map, published by the Geographical Society of Marseilles, that the mount is situated about 8° 35′ north latitude and 12° 45′ west longitude.

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(1) *Histoire d'Hérodote*—Translated by A. F. Miot, vol. 1, p. 246.

(2) Many attempts had already been made to reach the source of the Niger. Major Laing and W. Reade among others, failed in their endeavours. In 1879, one of the founders of the Marseilles Geographical Society, Mr. C. A. Vermink, organised, at his own expense, an expedition that was to be scientific and commercial at the same time. He entrusted the care of carrying out his plans to two young men, who had, for a long time, been employed in his African factories. Messrs. Z. Zweifel and Moustier left Rotombo the 8th July, 1879. On the 25th September, they arrived near Mount Tembi (*Tembi Coundou*, the *head of the Tembi*), a granitic hill from which springs the *Tembi*, the chief branch of the Niger. Unfortunately, this source, like that which Bruce took for the origin of the Nile, is sacred in the eyes of the natives. Tembi Seli, the high priest, forbade the French travellers going too close to it: they were only

The river, at first a mere brook, runs from north to south, but soon takes a general direction from south-west to north-east, which it maintains as far as Timbuctoo, just beyond the 18th degree. (²) At this point it takes a sharp bend to the east as far as Bourroum (³) for an extent of more than three degrees of longitude, when it turns off to the S. S.W. and runs into the Gulf of Guinea. It must consequently be between the first and second degree west longitude that the Nasamons reached the Niger. It is impossible to point out with greater precision the position of the town inhabited by negroes to which the bold travellers were conducted ; at all events, we feel perfectly certain that they could not mean the famous Timbuctoo, the foundation of which only dates from the fifth century of the Hegira (1100 A. D.), according to AHMED-BABA, the historian of that country. (⁴)

HERODOTUS informs us that the young Nasamons saw crocodiles in the river they visited, and this again is perfectly accurate, more so even than might be expected at first. *A priori*, it might be supposed, not without plausible reasons, that the large reptiles

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allowed to stand at a spot called Foria and gaze, at a distance, on the sacred mountain and the brook which rises from it. *Expédition C. H. Verminh. Voyage aux Sources du Niger par Z. Zweifel et M. Moustier, 1879. (Bulletin de la Société de Géographie de Marseille, 1880,* p. 129.*)*

(¹) M. RABAUD, President of the Geographical Society of Marseilles, in his report on this remarkable expedition, remarks very rightly that this want of instruments is not really to be regretted. Superstition is so strong in the country visited by the two Marseilles travellers, that the use of a field-glass alone was sufficient to cause threatening demonstrations on the part of the natives, and they had to give up using it. They would certainly have been massacred had they been caught in the act of making astronomical observations.

(²) 18o 3' 45" latitude and 4o 5' 10" west longitude. *Annuaire du Bureau des Longitutes, 1877,* p. 310.

(³) This place is situated on the easterly angle of the Middle Niger. *Voyages et Découvertes dans l'Afrique Septentrionale et Centrale*—by Dr. H. BARTH, translated by P. ITHIER, vol. IV, p. 10.

(⁴) BARTH, *loc cit.*, p. 5.

living in two rivers so far apart as the Nile and the Niger, must be of different kinds. But it is not the case; the question has been specially studied in consequence of discussions which had arisen between CUVIER and GEOFFROY ST. HILAIRE. The former of these two great naturalists attached so much importance to the debate that he devoted, in his *Règne Animal*, a chapter of exceptional length (1) to it.

CUVIER was convinced of the specific identity of all crocodiles inhabiting the large African rivers, whereas GEOFFROY denied it, and, in the Nile alone, asserted the existence of four distinct kinds. DUMERIL and BIBRON, in their exhaustive work on Herpetology, returned to the question with materials that had not been at the disposal of the two celebrated antagonists, and confirmed CUVIER's opinion. (2) In fact, the crocodile of the Niger, like that of the Senegal, is the same as the crocodile of the Nile.

Lastly, the Nasamons declared that they were taken to a town of which all the inhabitants were black, and this again is perfectly true. Although Timbuctoo was founded by the Touaregs, (3) who still dispute with the Berbers and Peuls the right of sovereignty over the city and the region drained by the central portion of the Niger, (4) yet we know that they are strangers to the country, and have settled there only at a comparatively recent date. In the tenth century, according to BARTH, the Negro land still extended as far as the 20th degree of latitude. (5) At that time, and *a fortiori* in the days of HERODOTUS, the whole of that region must have been occupied by a black race.

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(1) *Le Règne Animal distribué d'après son Organisation pour servir de Base à l'Histoire des Animaux et d'Introduction à l'Anatomie comparée*—by Baron CUVIER, new edition (2nd), 1820, vol. II, p. 21.

(2) Collection of the *Suites de Bouffon*, published by RORET: *Histoire Naturelle des Reptiles*—by MM. C. DUMERIL and BIBRON, vol. III, p. 104.

(3) According to AHMED-BABA, Timbuctoo was founded in the 5th century of the Hegira (1100 A. D.) by Touaregs who were in the habit of halting at that spot. (BARTH.)

(4) The Peuls took possession of Timbuctoo in 1826. In 1844, they were driven away by EL-MOUCHTAR, chief of some Berber tribes who had made an alliance with the Touaregs. (BARTH, p. 32.)

(5) BARTH, p. 10.

We may, accordingly, infer that the *black men* seen by the Nasamons were real negroes, and certainly had woolly hair. Travellers have, however, neglected to mention the latter peculiarity. Their silence on the subject justifies, as may be seen, the way in which I have interpreted the same omission respecting the Asiatic negro dwarfs.

Therefore, whether it is a question of country, streams, animals or men, everything is accurate in the account so far given by the Greek historian. What motive, moreover, could we have for doubting the information he gives us about the race discovered by the Nasamons? None whatever. And even if our present experience had not confirmed his report, we might still have accepted it as true. But modern discoveries have further confirmed the intelligence handed down to us by HERODOTUS, at least as far as the existence of such a race is concerned.

It is otherwise with regard to its geographical position. We saw that the locality is marked out in a well defined part of the river. In fact, the most northerly station of the western Pigmies, discovered to this day, is situated in the interior of Senegambia, towards 10° of north latitude and 14° west longitude, that is to say, about 8 degrees further south and 10 degrees further west than the spot where the Nasamons were captured by the little men. (1) We consequently find here again, *à propos* of Western Africa, the same difference between tradition and modern discovery, which we have already pointed out with regard to Upper Egypt and India. The dwarf race once more seems to be further away from us than it was at the time of the Greeks.

In the two preceding cases, we were able to impute this discrepancy to an incomplete knowledge which had led to diminishing the true distances, but in the present instance such a supposition is inadmissible. Considering the correctness of the account given by HERODOTUS and its accordance with material facts of an unvarying nature, we must admit, either that the dwarf race, seen by the Nasamons, still exists north of the Niger and has not yet been re-discovered, or that it has completely disappeared from that region.

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(1) MOLLIEN—*Voyage dans l'Intérieur de l'Afrique aux Sources du Sénégal et de la Sénégambie*—made in 1818. Paris, 1822, vol. II, p. 256. I will state with precision further on, the geographical localities inhabited by these small races lately examined.

Without wishing in any way to prejudge the future, I think the last hypothesis seems the most probable, and perhaps it must even also be applied to other countries where the ancients have placed their Pigmies. The Egyptians knew the Akkas under the name which they still bear, for M. Mariette-Pacha saw it inscribed near the figure of a dwarf sculptured on a monument of the old empire. (1) In fact, even granting that they were able to explore the Nile far beyond the obstacles which have stopped us until lately, nothing, in my belief, entitles us to suppose that they took a westerly direction and crossed from the watershed of the Nile to that of the Ouellé. It seems to me much more rational to suppose that, at the time of Aristotle, these Akkas tribes lived much further north, occupied at least the watershed of some tributary of the Nile, and perhaps reached the swampy region of the great river. Their retreat towards the south and west has nothing surprising in itself, for we shall see that, wherever we follow these small races, wherever we can gather sufficient information, they will appear to us as having been, in the past, more flourishing than at the present day, and as having also covered a more extensive and more continuous geographical area. Perhaps this general fact might be put forward to prove the accuracy of the account furnished by Pomponius Mela.

It was not under the attacks of animals—ærial or terrestrial—that these small men gave way, and that their communities were dispersed. We shall see, on the contrary, that some among them will face and conquer even the elephant. It is to human races taller and stronger than themselves that they are compelled to yield. These are, in Africa and Melanesia, the Negroes and Papuans; in the Malay countries, the different Malayan races; and in India, the Dravidians. In many places, in West Africa as well as in the Philippine Islands, and in the two Gangetic

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(1) Hamy—*Essai de Coordination des Matériaux récemment receuillis sur l'Ethnologie des Négrilles ou Pygmées*, p. 21.

Peninsulas, the true Pigmies have exercised a certain ethnological influence by inter-breeding with the superior races and in thus creating half-bred populations. Almost everywhere, also, they are still represented by groups offering different degrees of purity.

On the whole, the ancients had gathered information more or less inexact and incomplete, but at the same time more or less true, of three dwarf races which they called *Pigmies*. One of them was situated in Asia, in the south-eastern extremity; the second in the south, near the source of the Nile; the third, in Africa also, on the extreme south-western limits of the known world. These three groups have been discovered again now-a-days, nearly in the same direction, but at a greater distance from Greece and Rome than is admitted by tradition.

They are, however, but fractions of two well defined groups occupying—one in Asia, the other in Africa—a considerable area, and comprising distinct tribes, populations, and even sub-races.

From the very first years of my professorship at the Museum, I proposed to unite all the black populations of Asia, Melanesia, and Malay regions, characterised by their small stature or the relative slightness of their limbs, into one *Negrito branch*, (1) in opposition to the *Papuan branch*, in which I placed the oriental negroes remarkable for their height and sometimes athletic proportions. I have every reason to believe that, under one form or another, this division is generally adopted.

On his side, M. Hamy has shown, in a former account, that, contrary to the universally adopted idea, there exist in Africa certain negroes who differ from the classical type in a smaller size of the skull. (2)

Pursuing this order of research, he discovered that this cephalic characteristic corresponded with a very perceptible diminution in the stature. He gathered together the different observations which, up to then, had remained loose and scattered, and proved that Africa possessed, like Asia, a black sub-type, in which a remarkably reduced stature was one of the most striking features. He showed also that the African or Asiatic diminutive negroes, although so far apart, had many anatomical and other common points, and that these two groups were, in reality, two *corresponding terms*, geographical and anthropological at the same time.

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(1) I have thus applied to the whole race the name of the little negroes of the Philippines, also called *Aëtas*.

(2) *Cours d'Anthropologie du Muséum ; Nègres Asiatiques et Mélanésiens*—Lectures which were written out by M. Jacquart, Assistant Naturalist—*Gazette Médicale de Paris, 1862*. In these lectures, I summed up what I had already said on the subject, during the preceding year. I had professed the same opinion and established this division in anterior lectures.

M. Hamy proposed to give the name of *Negrillos* (¹) to the African dwarf tribes. This denomination, will, I think, be readily adopted by all anthropologists, and has the advantage of recalling one of the most important characteristics of the group as well as their link of connection with the Asiatic Negritos.

These are the two groups which I intend to resume the description of in the following chapters.

II.

THE ASIATIC PIGMIES, OR NEGRITOS.

Geographical Distribution and Physical Character.

The Negrito race, either pure or more or less mixed, is distributed over an immense tract. Its habitat is both insular and continental. In islands and archipelagos, its existence is now recognised from the south-eastern regions of New Guinea in Melanesia to the Andamans in the Bay of Bengal; and from the Malay Archipelago to Japan. On the continent, their tribes are scattered about from the Malay Peninsula to the foot of the Himalaya, in Kamaon; and from the mountains of Assam to the right bank of the Indus, in Daman and Beloochistan; (²) that is to

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(¹) *Note sur l'Existence de Nègres Brachycéphales sur la Côte Occidentale d'Afrique. (Bulletin de la Société d'Anthropologie de Paris*, 2nd Series, 1872, vol. VII, p. 210.)

(²) I have already given a detailed account of this geographical anthropology in several papers, such as, *Etude sur les Mincopies et la Race Négrito en général (Revue d'Anthropologie*, 1872, vol. I), in an article of the *Journal des Savants, 1872*, touching Earl's work on *The Native Races of the Indian* say, over a tract of country extending from 65° to 145° east longitude and from 2° to 35° north latitude.

A race that has spread over so vast a space could scarcely have retained everywhere its identity. Thus I have been constrained, since 1872, to sub-divide it into two other branches—the Malay or oriental branch, and the Mincopie or western branch. (1) So far, however, I had only been considering the exterior characteristics; the study of skulls has more recently led us—M. Hamy and myself—to define this division more distinctly, and to adopt two sub-races—the Papuan-Negritos, corresponding with the eastern branch; and the Negritos proper, representing the western subrace. (2)

Without entering into long details, it is easy to characterise these two secondary types. The Papuan-Negrito has a skull more elongated, from front to back, than his western brother, though still differing in a marked degree from the actual dolicocephaly, which is the mark of the Papuan. (3)

The skin, moreover, is not so black; the nose is more flattened and the chin more receding; the loins, thighs and legs offer a greater development. In short, both in feature and general physique, the Papuan-Negrito is inferior to the Negrito proper (4)

It is not easy to determine the respective limits of the two subraces. Perhaps actual limits cannot be said to exist; mingled together, the two types may have produced a population of a

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Archipelago; and also in a paper *Nouvelles Etudes sur la Distribution Géographique des Négritos et sur leur Identification avec les Pygmées Asiatiques de Ctésias et de Pline.* (*Revue d'Ethnographie*, vol. I, p. 179).

(1) *Etude sur les Mincopies*, p. 236.

(2) *Crania Ethnica.*

(3) The horizontal index varies from 80.00 to 84.00 with the Negrito; from 78.85 to 79.87 with the Papuan Negrito of New Guinea; from 69.35 to 78.23 with the Papuans of the same island. This last figure, very high and given by a woman's skull, might induce us to suspect the influence of cross-breed. I have already dwelt on these craniological differences, and will recall, moreover, that the Papuans are taller, stronger and more athletic than the Negritos. (*Journal des Savants*, *1872*, p. 626.)

(4) In order to establish this differential characteristic, I took, as terms of comparison, on one side the Papuan Negrito, such as he was described by Crawfurd, a description considered by Earl as very accurate; and on the other, the Mincopies of whom we possess now numerous photographs.

mixed character. We know, nevertheless, that the Andamanese and Philippine islanders belong to the Negrito branch, and the recent researches of M. Montano show that it is the same as regards the people of Mindanao. The Negritos of the continent seem to form part of the same type.

New-Guinea appears to be the centre of the Papuan-Negrito (1) population which, according to Earl's testimony, extends to Gilolo in the Moluccas. (2) On the one hand, M. Hamy has followed the type of the full-blood Negrito as far as Timor; (3) on the other, the individual seen at Epa by M. d'Albertis appeared to have presented all the exterior characteristics of the Negrito proper, among others, the perfectly black colour and the absence of prognathism. (4) In return, the Hindoo Negritos of Armankatak are, it seems, only of a deep brown colour. (5)

In short, we know little enough about the Papuan-Negritos. This ignorance is, in a great measure, owing to the fact that they have been and are still too often confounded with the Papuans as I have lately had occasion to remark in referring to the works of Wallace and Earl. (6) Many more recent travellers have fallen into the same error. M. Meyer, who resided some time in New Guinea, where he made a magnificent collection of skulls, leans to the opinion of Wallace and combats the impression that the Negrito species is represented, within that island, by two distinct types. (7)

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(1) *Crania Ethnica.*

(2) *The Native Races of the Indian Archipelago*—Preface, p. xii.

(3) *Documents pour servir à l'anthropologie de l'Ile Timor. (Nouvelles Archives du Muséum d'Histoire Naturelle de Paris*, vol. X, p. 263.

(4) *New Guinea; What I did and What I saw*—by L. M. d'Albertis, 1880. M. d'Alberti's travels were made from 1872 to 1875.

(5) Rousselet—*Tableau des Races de l'Inde Centrale. (Revue d'Anthropologie*, vol. II, p. 280.)

(6) *Journal des Savants, 1872*, pp. 106 and 627.

(7) *Antropologische Mittheilungen über die Papuas von New-Guinea. (Mittheilungen der Antropologische Gesselschaft in Wien*, 1874, vol. IV.) *Ueber hundred funf und dreisig Papua Schädel von New-Guinea und der Insel Mysore. (Mittheilungen ans dem K. Zoologische Museum zu Dresden, 1875*, vol. I). In his Monography of Papuans, published in our *Crania Ethnica*, M. Hamy made use of the figures given by M. Meyer, and showed that the German traveller had brought new evidence in support of the opinion he had himself combated.

M. Beccari himself, although struck with the resemblance of certain New-Guineans to the Akkas, does not insist on this point, (1) and the few words, borrowed by M. Giglioli, (2) from a letter of that traveller, are not more instructive. M. d'Albertis, while maintaining considerable reserve, which he explains by saying he does not know the Negrito type, at least understood that the individual he had before him at Epa was perfectly distinct from any he had seen until then. He thought that the point deserved to be studied.

Such has also been the opinion of Mr. Lawes, regarding the mountain tribes of Port Moresby. (3)

After all, the most complete description of the Papuan-Negrito which has yet been published, is that which we owe to Crawfurd. He expresses himself thus : " I do not think I ever saw any that " in stature exceeded five feet. (4) Besides their want of stature, " they are of spare and puny frames. Sir Everard Home, who carefully examined the individuals brought to England by Sir Stamford Raffles, makes the following distinctions between the Papuan " and African negro : his skin (speaking of the former) is of a " lighter colour ; the woolly hair grows in small tufts and each hair " has a spiral twist. The forehead rises higher, and the hind head " is not so much cut off. The nose projects more than the face ; " the upper lip is longer and more prominent ; the lower lip projects forward from the lower jaw to such an extent that the " chin forms no part of the face, the lower part of which is formed " by the mouth. The buttocks are so much lower than in the " negro as to form a striking mark of distinction, but the calf of " the leg is as high as in the negro (5).

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(1) *Appunti etnografici sui Papua.* (Cosmos, 1877.)

(2) *Studi sulla Razza Negrita.* (*Archivio per l'Anthropologia e la Etnografia*, 1876, vol. V, p. 334.

(3) *Ethnological Notes on the Motu, Koitapu and Koiari Tribes of New Guinea.* (*Journal of the Anthropological Institute*, vol. VIII, p. 369.)

(4) Beccari assigns to the New-Guineans, whom he calls *Alfourous*, a stature of 1m51 to 1m53. According to M. Leon Laglaise, the Karons never exceed 1m 60. (*La Papouasie ou Nouvelle-Guinée Occidentale*, par le Dr. Cte. Meyners d'Estrey, p. 121.) This tribe has perhaps become taller through crossbreed.

(5) *History of the Indian Archipelago*, vol. I, p. 23.

In support of this description, CRAWFURD borrows of RAFFLES the sketch of a young Papuan of New Guinea. (1) The child in question was, it is true, only ten years old, and the youth of the subject is open to critical observation, but we must bear in mind that, with these populations, physical development is more early than amongst Europeans. This readily explains how EARL, so good a judge in matters of this kind, could affirm the resemblance of this portrait to that of an adult. He relates that, in one of his journeys, he had for companion a negro of Gilolo who exhibited all the features of the *Papuan* of RAFFLES and CRAWFURD. He thus testifies to the accuracy of the English writers, as well as to the extension of the type to the Indian Archipelagos.

From what we have just seen, this type is not distinguished for beauty of feature, and, when observed in its original country, the general proportions of the body are in exact keeping with the face. According to EARL again, these Papuans, when transported as slaves in the Malay islands and placed in conditions of comfort unusual to them, improve rapidly. Their slender limbs become more regular, rounder, and, so to speak, smoother; the vivacity and gracefulness of their movements make up for the unpleasing stamp which the face retains.

The deplorable confusion, which I pointed out just now, is the reason why the differential traits between the Papuan-Negritos and the real Papuans, have not been studied with regard to the social state, customs, religion and industry of these people. WALLACE and EARL go so far as to say that, tall or short, the Papuans have but one way of living. This assertion has always seemed to me rather difficult to accept, and the accounts which begin to reach us justify more and more my doubts on the subject. However, in the present state of knowledge, it would be no easy matter to determine with certainty the exact limit between the two races, all the more so that they must often have mingled and produced half-bred tribes (2). I will, therefore, content myself with referring the reader to the most recent works on New Guinea, which has been a common centre of habitation to both types, who have there been able to develope themselves freely up to the present time. (1)

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(1) *History of Java*—by RAFFLES and CRAWFURD. Plate I.

(2) The tribes visited by Mr. COMRIE, in the neighbourhood of the Astrolabe Bay, appear to be in the same case. Out of 14 skulls, one only was sub-brachycephalic; the others were dolicocephalic. But the average stature of twenty men was 1^{m} 553 and even down to 1^{m} 321. These dwarfs could be neither Papuans nor half-bred Polynesians. The Negrito blood alone could have lowered the

The Negritos proper are much better known than the Papuan-Negritos. In the middle ages, the Arabs, and no doubt the Chinese before them, knew that the Andaman Islands were inhabited by black and crisped-haired people. (2) When the Spaniards first came to the Philippines, they found there a population of Aëtas, whom we know to be of the same race as the Mincopies. (3) Since that time, as we have become better acquainted with the Malay islands and the two Indian Archipelagos, we have seen that the localities, inhabited by these diminutive negroes, were more extensive and numerous than we had thought at first, and having acquired every accurate information, we now find it possible to form a general opinion as to the race and the differences existing between the most distant tribes.

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stature to that degree. This association of dolicocephalism and small stature is an example of the juxtaposition of characters on which I have often dwelt in a general manner, and which M. Montano has himself verified among the half-bred Negritos. (*Anthropological Notes on New Guinea* by Dr. Comrie—*The Journal of the Anthropological Institute*, vol. VI, p. 102.)

(1) I would first recommend the travels of M. d'Albertis here above-mentioned, and those of M. Giglioli who, though he did not actually visit New Guinea, has gathered most interesting information on the specimens he met in different places, and imparted it to Beccari. A summary of all the knowledge we have regarding these people, has been published by Count Meyners d'Estrey (*La Papouasie ou Nouvelle-Guinée Occidentale*). I will also refer to the two memoirs of M. Mantegazza: *Studi antropologici ed etnografici sulla Nuova-Guinea (Archivio per l'Antropologia e la Etnologia* —1877, VII) and *Novi Studi Craniologici sula Nuova-Guinea (Archivio* —— vol. XI, 1881). In his first paper, M. Mantegazza upheld the ethnological unity of all the New Guinea Negroes. Since then, he has been brought over to believe in the dualism of these races from the simple inspection of the skulls collected by M. d'Albertis, and he has imparted his ideas to us in a paper addressed to the Anthropological Society of Paris (*Bulletins, 3me Serie*, vol. III, p. 214). Another paper by Mr. Lawes is also most instructive on the subject.

(3) Soleyman's accounts gathered by Abou-Zeyd-Assam (*Relation des Voyages faits par les Arabes et les Persans dans l'Inde et la Chine, dans le IXme Siècle de l'Ere Chrétienne*—Texte arabe par Langles, 1881; traduction et éclaircissements par Reynaud, 1849.)

(3) This name, given to the Andamanese, has caused many interpretations to be made. I gave an explanation of it a long time back. Lieutenant Colebrooke's vocabulary tells us that the natives call their own country *Mincopie*. It is obvious that it got applied also to the inhabitants (*On the Andaman Islands*—by Dr. R. H. Colebrooke; *Asiatic Researches*, vol. IV, 1799, p. 385, alluded to in my paper on the Mincopies.

Let us say, to begin with, that these differences are very small when bearing on the characteristic which interests us the most, in fact the special feature which has led us to this investigation. Everywhere the stature of Negritos is sufficiently low to allow of their being placed among the smallest races on earth. The unanimous testimony brought by travellers during a long period has cleared up all doubt on the subject, but they only applied themselves to general and vague observations, we, on the contrary, possess at present exact and sufficiently numerous measurements for three of the principal Negrito stations, that is, for Luzon, the Andaman Islands and the Malay Peninsula.

Two French travellers—MM. Marche and Montano (1)—have quite lately visited Luzon and measured native Aëtas, the former at Binangonan of Lampon on the Pacific Coast, the latter in the Sierra de Marivelès. They have kindly communicated the results to me, and authorised me to publish the following summary :—

		Maximum.	*Minimum.*	*Average.*
M. Marche,	7 men	1^{m} 472	1^{m} 354	1^{m} 397
	3 women	1^{m} 376	1^{m} 310	1^{m} 336
Dr. Montano,	18 men (2)	1^{m} 575	1^{m} 425	1^{m} 485
	12 women	1^{m} 485	1^{m} 350	1^{m} 431

These figures would seem to show that the mountain population is, on the average, slightly taller than the coast tribes ; but it may be, perhaps, that M. Montano, having been able to measure a greater number of natives, has approached reality more closely.

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(1) MM. Marche and Montano were sent, on a scientific mission, to the Philippine Islands by the "Ministère de l'Instruction Publique," and both fulfilled their duty in a most remarkable manner. M. Marche confined himself to exploring Luzon. His collections are very valuable in a zoological as well as anthropological point of view. The exhibition he made at the "Société de Géographie" drew very great attention by the variety and ethnological value of many of the articles exposed.

M. Montano, after having spent some time in the neighbourhood of Manilla, went over to Mindanao and explored some of the least known regions. He also brought back most important and varied collections. Moreover, he communicated to the "Société de Géographie" a mass of observations, notes, itineraries and maps, so complete and valuable as to deserve the "Prix Logerot" (gold medal), which was awarded to him on Dr. Hamy's report at the public meeting of the 28th April, 1882.

(2) In a note he gave me, M. Montano remarks that, out of the 18 men he measured, 5 only exceeded $1^{m}50$.

However, one sees that the mean height of these Philippine Aëtas—men and women—is about 1^{m}413.

Let us now pass to the other extremity of the maritime habitat of Negritos.

When I published the first results of my study of the Mincopies, the number of measurements taken of these islanders, amounted to five only (1); they gave 1^{m}480 for the maximum height, 1^{m}370 for the minimum, and 1^{m}436 for the mean. Since then, Mr. Flower, adopting the method of Owen, has attempted, in an excellent anatomical work, to determine the height of Mincopies from the inspection of 19 skeletons of men and women. (2) His results have been confirmed, in a most striking manner, by actual measurements taken by Mr. Brander of 15 men and as many women. (3)

The following is a table of the figures obtained by these two distinct methods :—

		Maximum.	*Minimum.*	*Average.*
Mr. Flower,	men (4)	1^{m} 600	1^{m} 385	1^{m} 448
	women	1^{m} 481	1^{m} 302	1^{m} 375
Mr. Brander,	15 men	1^{m} 562	1^{m} 408	1^{m} 476
	15 women	1^{m} 441	1^{m} 308	1^{m} 366

The difference is very small, and, for the average figures, amounts to 0^{m}028 for men, and 0^{m}009 only for women. Moreover, for the maxima and minima, the highest numbers balance each other; these variations must consequently be owing to real differences of height and not to the inductive method followed by one of the authors. They lead us to assign to Mincopies, taken in a body, a mean stature of $1^{m}416$ exceeding by 3 millimètres only that of the Aëtas. If we simply take into account the actual measurements made by Mr. BRANDER, this average height becomes $1^{m}421$ for Mincopies, and the difference between the latter and the Aëtas is not more than 8 millimètres.

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(1) One of these measurements was not actually taken from the native's body but rested on calculations made by Mr. R. Owen and was based on the relative proportion of the length of the femur to the total height of the individual. (*Transactions of the Ethnological Society*, vol II, p 40.)

(2) *On the Osteology and Affinities of the Natives of the Andaman Islands* by W. H. Flower (*Journal of the Anthropological Institute*, vol. IX, p. 108.)

(3) *Stature of the Andamanese*, in which Mr. Flower gives the results obtained by Mr. C. E. Brander. (*Journal of the Anthropological Institute*, vol. X, p. 124). Mr. Brander's paper came out in the *Proceedings of the Royal Society of Edinburgh*, 1878-1879, p. 416.

(4) The English anatomist does not indicate the number of skeletons of both sexes he had examined.

The first accurate information on the height of Negritos living in the Malay Peninsula, has been furnished by Major MACINNES and given again by CRAWFURD. (1) More recently still, the celebrated Russian traveller, M. MICLUKO-MACLAY, has published, on this people, a work which, to my regret, I only know through a summary given by M. GIGLIOLI. (2) Lastly, MM. MARCHE and MONTANO have collected new measurements which are rendered more interesting by the fact that the names of the different tribes referred to were taken with great care. The following is a summary of these records, with the exception of MACINNES' measurement which, as it relates only to one single individual, has now lost its former importance:—

		Maximum.	*Minimum.*	*Average.*
M. MICLUKO-MACLAY,	men (3)	$1^{m}620$	$1^{m}460$	$1^{m}540$(4)
	women	$1^{m}480$	$1^{m}400$	$1^{m}440$
Mr. MARCHE,	10 Sakaïs (5)	$1^{m}705$	$1^{m}462$	$1^{m}584$(6)

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(1) *History of the Indian Archipelago*, vol. I, p. 23. The height of the single individual examined by MACINNES is $1^{m}445$.

(2) *Nuove Notizie sui Popoli Negroidi dell'Asia e specialmente sui Negriti.* M. MICLUKO-MACLAY'S Memoir, called *Ethnologische Excursionen in der Malayischen Halbinsel*, was published as an extract from the *Natuurkundig Tijdschrift* of Batavia. (*Archivio per l'Antropologia e la Etnologia*, vol. IX, p. 173.)

(3) M. GIGLIOLI'S summary does not indicate the number of individuals nor their origin.

(4) In this case, the mean figures could not be deducted from the aggregate of observations, the number of which I don't know; they simply express the intermediate number between the maxima and minima.

(5) M. MARCHE'S measurements were taken at Naga-Barou in Pêrak, and apply to adults only.

(6) The average figures for MM. MARCHE and MONTANO are deduced from the whole of their observations.

M. Montano,	12 Manthras (1)	1^{m} 580	1^{m} 330	1^{m} 461
	8 Knabouis	1^{m} 578	1^{m} 455	1^{m} 517
	2 Udaïs	1^{m} 545	1^{m} 390	1^{m} 467
	2 Jakouns	1^{m} 550	1^{m} 525	1^{m} 537

According to these figures, the mean height in those different tribes would be $1^{m}507$, thus exceeding by $0^{m}094$ the stature of the Aëtas and by $0^{m}091$ that of the Mincopies.

But we must take into consideration the influence of intermixture. One of the photographs, for which I am indebted to M. J. E. de la Croix. (2) is most instructive in that point of view. It represents, at full length, seven Sakaïs. Three of them have smooth hair, the others have it more or less woolly; but these are much shorter than the former, the difference between extremes being about one tenth. It shows us that, in this tribe, the original negro type has been altered by mixture with a much taller ethnical element.

This fact, which can be ascertained at a glance, explains the difference, found by MM. Marche and Montano, between the maximum and minimum height of the aforesaid tribes and of the Manthras. This difference is $0^{m}213$ for the former, and $0^{m}250$ for the latter. Nothing of the kind exists with regard to the Aëtas and the Mincopies who have remained unmixed or very nearly so. With them the variation only reaches $0^{m}118$, $0^{m}150$ and $0^{m}154$, according to actual measures taken on the body.

In fact, in all these tribes, whether insular or continental, the minima approach very near to each other, and it is among the Manthras that the smallest size has been met with. Between them and the Aëtas measured by the French travellers, and also Brander's Mincopies, the difference is only 24, 95 and 78 millimètres.

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(1) In this table, I have put together the measurements taken on both sexes. Since this was written M. Montano has published another table in which the height of men and women is shown separately for the Manthras and Knabouis. He measured one woman only among the Udaïs and none among Jakouns. (*Revue d'Ethnographie*, vol. I, pp. 42 and 43).

(2) The two photographs, handed to me by this traveller, were taken by his companion M. de Saint Pol-Lias

We may consequently infer that the primitive Negritos of Malacca were not taller than the Aëtas or Mincopies. (¹)

Our knowledge is much less advanced with regard to the Negritos of India. Here, cross-breeding has very nearly caused the primitive stock to disappear, so much so that the existence of real negroes in that country has, until lately, been formally denied. The observations of several English travellers, (²) and the evidence gathered by M. Rousselet, (³) must, however, have removed all doubt on the subject; they show us that a few rare and unaltered specimens of the primitive type are still to be found, but only in the most inaccessible and unhealthy parts of the country. Unfortunately, the information collected about them amounts to very little. The individual seen by our countryman, and of whom he made a portrait, ran away during the following night, terrified by the partial inspection he had undergone. English travellers, who have been able to examine them more leisurely, have gathered but very little information about them, in some instances they even are silent respecting their hair, their drawings alone affording information in that respect.

M. Rousselet, on the contrary, has not failed to mention the *woolly curls* which partly concealed the forehead of his Bandar-lokh. (⁴) This characteristic, certainly the most

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(¹) In order to have only the most accurate terms of comparison, I left out the measurements calculated by Mr. Flower, and also different observations on women taken by different travellers, as well as the figures obtained by M. Montano with regard to Udais and Jacouns, of whom he only measured two individuals.

(²) I will chiefly mention the works of Mr. Justin Campbell—*The Ethnology of India (Journal of the Asiatic Society*, vol. XXXV, p. 2, Supplementary number*)*; Dalton—*Descriptive Ethnology of Bengal*; Fryer—*A few words concerning the Hill-people inhabiting the Forests of the Cochin State (Journal of the R. A. S. of Great Britain and Ireland*, 2nd Series, vol. III). Among the plates published in these various works, several represent photographs of individuals whose Negrito type strikes one at the first glance.

(³) *Tableau des Races de l'Inde Centrale* (*Revue d'Anthropologie*, vol. II, p. 276, with a plate and a map. Previously to this, I had inserted, in my *Etude sur les Mincopies*, a note transmitted to me by M. Rousselet himself and referring to the same subject.

(⁴) Literally *men-monkeys*. That name has been given to these Negritos by the neighbouring tribes. They also call them Djangâl, or *jungle-men*, which is a generic name they apply to all populations more wild than themselves.

important of all when the negro race is in question, testifies to the purity of blood, though the colour of the skin was of a rusty-black. (¹) Let us add that his general physique, in spite of the alteration brought on by misery and hunger, was in exact keeping with the true Negrito type. His height, says M. Rousselet, was hardly $1^{m}50$.

The Puttouas, measured by an English Officer, reached $1^{m}57$, but the women were only $1^{m}291$. According to Dalton, the size of the black and frizzle-headed Juangs is $1^{m}525$ for men and $1^{m}416$ for the women. Among the Oraons the maximum stature observed was $1^{m}57$, and fell again to $1^{m}525$ with the Bhûihers who, by their general physique, reminded him of the Andamanese. This last figure is often to be found in the description of other more strongly mixed tribes. The average of all these figures is $1^{m}488$ at the outside. This group of populations is, therefore, similar, as regards height, to the preceding groups.

These differences in size can be expressed by figures, and can consequently be made obvious to every one; but it is otherwise with regard to other characteristics, such as the general proportions of the body, the features of the face, &c., of which only numerous drawings can convey a true notion. All I can, therefore, do is to summarise the impressions which I have gathered from the various documents fortunately put at my disposal. In writing these lines, I have, under my eyes, Colonel Tytler's full length photographs (²) of seven Andamanese; the phototypes published by Mr. Dobson, and representing, also in their full height,

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The village visited by the English Officer belonged to the Puttouas, *leaf-men*, so called from the habit of women to wear, as only garment, two bundles of fresh leaves hanging in front and behind. (Rousselet.)

(¹) This light colour is probably a consequence of the wretched existence of these tribes from time immemorial. It is known that under the effect of sickness, the African Negro becomes paler.

(²) These two photographs represent a grown-up man, a young boy and five women or girls. In one of them, they are naked; in the other, they wear a kind of blouse tight round the neck and drawn round the waist by a belt. However elementary this costume may be, yet it is sufficient, in spite of their shaved heads, to remove somewhat of the strangeness they display when entirely nude.

divers groups of sixteen natives of the same islands; (1) thirty-six photographs by M. Montano, showing the features of forty-eight Aëtas, men and women, young and old, pure and mixed; lastly, two photographs of Pêrak Sakaïs, taken by M. de Saint Pol-Lias, and kindly placed at my disposal by his fellow traveller, M. J. E. de la Croix. (2)

Never have such a quantity of authentic documents been collected. As I discuss them, I shall take the Mincopies as a term of comparison; owing to an isolation which has extended to this day, they have preserved an ethnical purity that is seldom to be found even among populations which are best protected from the infusion of any foreign blood.

What strikes us at first in the twenty-three portraits of Mincopies is a great similarity in the proportions of the body, and in the features of the face, and the almost identical expression of their countenance. Indeed, there is nothing surprising in the fact. Isolated for centuries (3) from the rest of the world, marrying only among themselves, subject to the same conditions of life, the natives of the Great Andaman have preserved a uniformity of breed which we might compare to that of an animal race reared under a careful direction. The two sexes living exactly the same kind of life, it is not surprising that many of the differences which, in other countries, distinguish man from woman, should have disappeared.

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(1) *On the Andaman and Andamanese* by G. E. Dobson; *The Journal of the Anthropological Institute*, vol. IV, p. 457. pl. XXXI. XXXII, and XXXIII. These phototypes represent five men, seven women, and four young girls. The original photographs, such as Colonel Tytler's, were taken in the southerly part of the island known for a long time under the name of the Great Andaman, which ultimately was found to be divided by small channels into three distinct islets (See the map of E. H. Man, Esq., in the *Journal of the Anthropological Institute*, vol. VII, p. 105.

(2) MM. de Saint Pol-Lias and J. E. de la Croix were entrusted with a scientific mission by the "Ministère de l'Instruction Publique." M. de la Croix intends publishing shortly his observations on these tribes I have to thank him all the more for having communicated to me these photographs as well as notes to which I will refer hereafter.

(3) The Andaman Islands were known by the Arabs from the ninth century (*Relation des Voyages faits par les Arabes et les Persans dans le IXme Siècle de l'ère Chrétienne* by Abou-Zeyd-Hassan, printed by Langles, 1811; translated by M. Reynaud, 1849), but the reputation of barbarism and cannibalism attributed to the inhabitants had always kept travellers away. The same motive, and probably also the absence of cocoanut-trees, which are nowhere to be seen in this little archipelago, prevented the Malays from invading it as they did the Nicobars. In 1790, the English attempted to establish there a convict station (Fort Cornwallis) which was abandoned soon after. The scheme was taken up again and carried out in 1857. The new Settlement (Port Blair) attracted many travellers, among whom Dr. Mouat deserves a special mention. Maps, drawings, photographs, complete skeletons, &c., were sent to Europe and examined by MM R. Owen and

The measurements, necessarily approximative, taken of the young girl placed in the centre of one of Mr. Dobson's groups, have given me, regarding general proportions, a little over seven heads for the total height of the body. I had found the same ratio in examining the portrait of Jack Andaman, published by M. Mouat. (1) In that respect, the Mincopies come very close to the Egyptian "Term" (2) measured by Gerard Audran; and, as their heads are at the same time broader, they look larger as compared with the rest of their bodies.

The same characteristic is found again among Aëtas. I was, however, able to measure but one of the individuals photographed by M. Montano, the others having a too abundant crop of hair. His total height is hardly seven times the length of the head; and, as far as I can judge, the proportion seems to be the same with regard to the Sakaïs of M. de Saint Pol-Lias.

There is nothing surprising in this. Quételet has well explained how, in our own country, this ratio changes and varies according to age and size. In the case of a child or a dwarf (3) the proportion

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G. Busk in England, by M. Pruner-Bey and myself in France. I gave an historical and detailed account of it in my *Etude sur les Mincopies* (1872). In the present instance, I will only mention the works published since then.

(1) *Selection of the Records of the Government of India, No. XXV—The Andaman Islands*, Pref., p. xi., and frontispiece.

(2) According to the famous artist, this "Term" has $7\frac{1}{4}\frac{9}{8}$ heads. The Pythian Apollo, who represents the other extreme of the measurements made by Audran, has $7\frac{4}{4}\frac{2}{8}$ heads. One knows that Audran divided the head into ten equal parts, which were again sub-divided into twelve minutes. In order to establish an easier term of comparison, I have reduced those fractions to the same denominator.

(3) We mean here real dwarfs, and not the microcephalous beings too often confounded with them. I have already dwelt on this distinction in a note concerning the real dwarf who exhibited himself under the name of "Prince lthazar." *(Bulletin de la Société d'Anthropologie*, 1881, p. 703).

between the head and the total height of the body is much greater than in the case of an adult or a giant. (¹) It is a continuation of the morphological transformation which begins immediately after birth. One might, therefore, expect to find the head of a Negrito comparatively larger than ours. Among the Mincopies, men or women, whose posture in the drawing allows us to judge of this detail, the body is very nearly all of a size and hardly gets wider at the pelvis and trochanters. (²) With young girls, the breast is very small and conical; with women, it is fuller and remains pretty firm. With both sexes, the chest and shoulders are wide, the pectoral muscles developed, the arm and forearm are muscular, at the same time preserving a well rounded outline. The hands are rather small, with long slim fingers, sometimes of a very elegant shape ; the nails are long and narrow. The abdomen does not project too much. The lower limbs offer the same characteristics as the upper ones, though the thigh and leg are often less brawny than the arm or forearm.

The calf of the leg is generally placed rather high, at least in women. (³) This last characteristic, on which I insisted in my first articles, as recalling one of the traits of the African negro, is wanting in the only man whose legs are conspicuous in Mr. DOBSON's phototypes, for his calf is prominent and perfectly well shaped. (⁴) Lastly, in the pictures where the individual is placed

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(1) QUETELET—*Anthropométrie*, p. 205, &c.

(2) I had already made this remark in my first memoir. To this M. GIGLIOLI objected by putting forward one of the women, whose pelvis, says he, is rather wide. If this is the case, that woman is certainly not represented in the plate published by him. (*Viaggio intorno al Globo della pirocorvetta italiana* "*Magenta*," p. 249; and *Studi della Razza Negrita*, (*Archivio*, vol. V, p. 308.)

(3) This characteristic is remarkable with three of the women represented in Colonel TYTLER'S photograph. As for the man's legs, they are hidden.

(4) Loc. cit., pl. XXXI. This same individual is noticeable for his general aspect. Everything in him indicates strength. The chest is wide, the pectoral muscles are developed, like in all the other men ; the thighs are very brawny. And yet we find here again a roundness of outline, a want of projecting muscles, which have already been pointed out in many savages, particularly among Americans.

so as to be well seen, the foot is small, high and arched, and the heel by no means projects backwards. (¹)

M. MONTANO's photographs show, with regard to Aëtas, very nearly similar characteristics for the upper part of the body. The shoulders and chest are wide, the pectoral muscles well developed, the arms are fleshy and without too great a projection of the muscles. But the waist is noticeable and rather small in a certain number of men and women. The lower limbs, in both sexes, with the exception of two or three women, are less developed than the upper ones, and are at times really slender. Owing to this, and also to the posture they assume in the photograph, the feet of a certain number of them appear bigger and wider than those of the Mincopies.

It is quite different with regard to the Sakais, especially those whose hair proves them to be true Negritos. Their lower limbs are quite as well developed as the upper ones ; one of them, in particular, is remarkable for the size of his legs and arms, and yet the outline of his body has lost nothing of its roundness. With all of them the calf is placed where it ought to be, according to our European notions, and the feet are like those of the Mincopies ; at all events the heel does not protrude in any exaggerated degree.

In reality, the only characteristics in which the Mincopies agree with the African negro are their hair and complexion. In all my photographs, the head is entirely shaved, but the unanimous testimony of travellers leave no doubt as to the woolly appearance of the hair. FFYTCHE, MOUAT, &c. add that the hair seems to grow in tufts and forms these peculiar *gromérules* so often noticed by travellers with regard to certain Papuans. M. GIGLIOLI has verified, in two photographs, the accuracy of this information. (²) The portraits of a few Aëtas and Sakais show the same characteristic. It follows that half-breeds have, according to the degree of intermixture, wavy, curly, or frizzled hair, entirely different from

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(¹) Colonel FFYTCHE had already insisted on that point as a mark of distinction between the Andamanese and the African Negrito. *On certain Aborigines of the Andaman Islands.* (*Transactions of the Ethnological Society*, new series, vol. V, p. 40.)

(²) *Studi sulla Razza Negrita*, p. 309.

that of Malay populations. (¹) Mr. Flower, on his part, has observed that their hair is more elliptical in section than that of any other human race. (²)

All travellers affirm that the Aëtas, like the Mincopies are of a decidedly dark complexion. (³) As for the half-breed trbes of Malacca, the mixture of blood seems to have produced a lighter colouring of the skin. In a note which M. Montano kindly wrote to me, he describes those he saw in the neigbourhood of of Kessang (north of Malacca) as having often a fuliginous skin. Judging from the photographs, they seem to be even of a darker shade. A statue of *black bronze* would give the very same effect as the robust Sakai to whom I have already alluded.

In spite of the similarity of hair and complexion, it is, however, impossible to confound a Mincopie with a true African negro, the divergence being much too great in the shape of the head and the features of the face. The head, seen in front, appears to have a globular appearance, instead of being compressed and elongated. The forehead is wide and in many cases prominent, in lieu of being narrow and slanting. (⁴) The face widens out at the cheekbones, which draw out the cheeks rather too much. The ears, most conspicuous on their shaved heads, are small and well shaped; the nose is very depressed at the root, straight, and rather short than otherwise; nostrils not too full, generally narrow ; (⁵) the lips, though not very thin, do not project as in the Negro, and above all are not heavy at the commissure ; the chin small, rounded and hardly retreating. Prognathism can scarcely be said to exist.

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(1) Unpublished note communicated to me by M. Montano.

(2) *Loc. cit.*, p. 127.

(3) I refer the reader to my quotations of Messrs. Mouat, Tytler, Colebrooke, St. John, &c. (*Etude sur les Mincopies*). Symes and Colonel Tytler are the only ones who have alluded to a *sooty-black* complexion. I have already remarked that this description is probably due to their having seen individuals who still retained traces of the yellow earth with which they are in the habit of covering their body as a protection against mosquitos.

(4) This trait is very remarkable in the only woman seen *de profil* in the photograph of Colonel Tytler, which has been reproduced in my *Etude.* All the individuals depicted by Mr Dobson have been taken full face, as well as those represented in M. Giglioli's engraving.

(5) For instance, the chief represented by Mr. Dobson, *loc. cit.*, pl. XXXI.

Lastly, the men seem but seldom to have traces of a moustache. (¹)

As one examines one by one the twenty-three photographs, which I have under my eyes, it is easy to discover many individual differences, and yet it is impossible not to be struck by the general uniformity of the physiognomy. This result is chiefly due, no doubt, to the peculiar shape and disposition of the eyes. (²) They are round and rather projecting, pushed back to the sides, and further apart than with us, (³) giving thus to the countenance a peculiar and strange expression; but they are bright and very strong as is usual among savages.

This separation of the eyes is not so great nor so common among Aëtas. It is, therefore, not surprising that the physiognomy of these two races should be different. Furthermore, though the features indicate in reality a variety of the same type, they are usually coarser in the Philippine Negro. The forehead remains wide and rounded off, as is easily seen when it is not covered by hair; but the root of the nose is more depressed, nostrils wider and fuller, lips thicker, not however to the same degree as in Negroes; their commissure sometimes more fleshy. Lastly, the chin recedes, but less than in the Papuan-Negrito, and when cross-breeding does not interfere, the Aëtas seem to be as beardless as the Andamanese.

The photographs, taken by M. DE SAINT POL-LIAS, show that the Malacca Negritos are in feature more like Aëtas than Mincopies. Such is the case also with the Indian Negrito, as far as we can

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(¹) Hairy covering is equally absent on the body, except in the places of election.

(²) In the plate which I have published, the engraver has reproduced the model, and particularly the eyes, very badly. Of this I have been careful to warn the reader. However, as he has indicated well the space between the eyes, the general physiognomy has been pretty well preserved.

(³) This character is well shown by the photographs of Colonel TYTLER and by Mr. DOBSON'S phototypes. It is wanting, on the contrary, in most of the individuals represented in the plate published by M. GIGLIOLI. Moreover, the physiognomies in the latter engravings recall in no way those of which I have just spoken. The shape of the head is perfectly different to what it looks like in the photograph, and even differs from the description given by the author himself (p. 249). Among others, I will point to the tall individual standing up on the left. Can he be called a half-cast? Or is it the fault of the artist who copied the photograph badly?

judge from M. Rousselet's (¹) drawing. Only, here the type has been degraded by the miserable conditions of life in which the Djandals are placed in Amarkantak. The forehead has become depressed, the nose has got bigger, and the lips thicker, though not projecting so much as in the Papuan-Negrito, the chin hardly receding. In spite of this physical degradation, these unfortunate Negritos are far from having assumed the well-known countenance of the African Negro, still less the look of a monkey, or any other animal. On the other hand, the Oraon and the two Santals, represented at full length by Mr. Dalton, unmistakeably remind us of the Negrito type (²); the same is the case with regard to some of the Mulchers depicted by Mr. Fryer. (³)

This description would not be complete if I did not say a few words regarding the skeleton: but I shall be very brief, and, for further information, will refer the reader to technical publications, and more especially to Mr. Flower's exhaustive work. (⁴)

The skeleton of the Mincopie, although small, presents no sign of degeneracy or weakness. The bones are comparatively thick, the muscular points well defined and at times remarkably conspicuous. The relative proportions of the bones, the shape of the pelvis, &c., are not far from the average of what exists with the Australian or the Negro.

It is quite otherwise with regard to the head. The Australian and the true African Negro are dolicocephalous, whereas, as I have already had occasion to observe, all Negritos are more or less brachycephalous. This latter characteristic is, therefore, to be found among the Mincopies, (⁵) and is associated with others which give

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(¹) *Loc. cit.*, p. 280.

(²) *Loc. cit.*, Frontispiece and p. XXIX.

(³) *Loc. cit.*

(⁴) The Memoirs of Messrs. Owen, Busk, Pruner-Bey, quoted in my *Etude sur les Mincopies*, may be consulted, the latter also, as well as the *Crania Ethnica*, p. 183, pl. XIII to XVIII.

(⁵) M. Hamy and I have found, for the horizontal index of the Andamanese, 82.38 for men, and 84 for women. Mr. Flower's measurements, made on a much larger number of skulls, reduce it to 80.50 and 82.70. It will be seen that the difference between the two sexes remains very nearly the same, and that the women are more brachycephalous than the men.

a peculiar stamp to the skull, allowing often of its being distinguished at a first glance. Moreover, there are not more divergences in the skeleton than in the body. Mr. **Flower** has insisted on this point, and declared that, in no other race, would it be possible, unless an intentional and rational choice were made, to gather such a number of identically shaped skulls. It is evident that the causes, which I have pointed out above, have produced this uniformity in the osteological characteristics as well as in the outward form.

The Mincopie's head, (¹) although large as compared to the size of the body, is, as a matter of fact, very small. Seen in front, and better still from behind, the cranium is obviously pentagonal. The face is massive, owing chiefly to the width of the zygomatic arches, to the small depth of the fossa-canina and also to the direction of the ascending apophysis of the maxillar. Instead of winding round so as to raise and reduce the frame of the nose, it rises straight up ; as a consequence, the inter-orbital space is considerably enlarged, and the bones of the nose can join but at a very obtuse angle. One thus understands how the shape and disposition of this bony structure can control and explain the exterior characteristics to which I have alluded above. Mr. **Flower** has also insisted, as I had done myself, on these peculiarities of the facial bones. (²) Let us add that, among pure Aëtas, this feature is as well defined as in Mincopies.

I shall finish this brief summary with a quotation. After having minutely and for a long time examined twenty-four skulls of Mincopies, Mr. **Flower** wrote : " My present impression is, that " I could never fail to recognize the skull of a genuine Andamanese

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(¹) Their cranial capacity, according to Mr. **Flower**, is only of 1.244 cubic centimètres for men, and 1.128 for women. **Broca** had found higher figures, but he had only seven skulls at his disposal. He gives as average of the cranial capacity of 124 modern Parisians 1.558 cubic centimètres for men, and 1·337 for women. The lowest average he ever found was that of the Nubians (1.329 and 1.298 cubic centimètres). It is apparent, therefore, in accordance with Mr. **Flower**'s opinion, that the Mincopies are, in that respect, the very lowest of human races.

(²) Among the Papuan-Negritos, the same characteristics are to be found, though not so well defined.

" as being such, and that I have never seen a skull from any other " part of the world that I should assign to a native of these " islands." (1)

These lines of the eminent English anatomist explain how it is possible to trace out and recognize this type, even when seen far away from the land where it has preserved its integrity. The craniological characters have a great persistence ; when cross-breeding interferes, they sometimes modify each other reciprocally, but often also, perhaps more usually, a kind of separation takes place and the two types are respectively represented, in half-casts, by a certain number of well defined traits. When these traits are very special, like those I have just pointed to, they can easily be distinguished. This is how M. Hamy and myself have been able to certify that the Negrito element has played a more or less important part in the formation of the Bengal and Japanese populations.

(*To be continued.*)

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(2) *Loc. cit.*, p. 112.

ON THE PATANI.

THE Patani river takes its rise in the same mountains from which fall the northern tributaries of the Pêrak, about 5.35 north latitude.

The Pêrak, fed by the watershed from the western slopes on the ranges which divide Kĕlantan and the Patani provinces from Pêrak and Kĕdah, flows southerly; whilst the Patani, draining the eastern flank of a small section of the northern extremity of these ranges, takes a northerly course and falls into the Gulf of Siam in latitude 6.55 north.

Patani was formerly a rather extensive country, but after being subdued by the Siamese, it was subdivided into minor provinces, probably with the view of weakening its power of resistance by destroying its solidarity; and the whole of these minor provinces, along with a number of others in Siamese Malaya, were put under the jurisdiction of Singora, or Songkra, which is the largest and most important of the Siamese Malayan States.

The provinces through which the Patani river flows (beginning at its source) are Raman, Jalor, Nunchit, or Nuchi, and Patani, the last embracing country on both sides of the river at the Kuâla; the largest of these provinces is Raman, and the smallest Patani, and each has a Râja of its own who is directly responsible to the Chow Kun of Singora.

The bay of Patani is formed by the projection of a narrow strip of land about seven or eight miles in length which, connected with the mainland to the eastward, bends round to the north-west in the form of a horn or segment of a circle and protects the roadstead; so that vessels can at most seasons ride in safety; the western extremity of this projection is called Cape Patani.

The Patani has an extensive delta which has not yet been thoroughly explored, and which is intersected by numerous creeks.

The principal of these are Kuâla Barat, Kuâla Plimau, Kuâla Tujông, or Ayer Tawar, Kuâla Lisah, Kuâla Kayu and Kuâla Tunyo, besides many smaller ones of which I could not ascertain the names. The most important is Kuâla Tujong, or Ayer Tawar, which bifurcates from the Patani about ten miles up that river and is there called Kuâla Nuchi; it has thus three names—Tujong, Ayer Tawar, and Nuchi; all the others are branches from it and I have little doubt but that at one time the Tujong was the main river, indeed if judged by size and volume of water it may still be considered so. At the sea it is much deeper than the Patani, and tongkangs of considerable burthen can go up as far as its junction with the Patani at Kuâla Nochi.

There are many instances on the east coast of the Malay Peninsula of rivers having changed their course in a very remarkable manner; here a little below Kuâla Nuchi, on the Patani, stretches a belt of rock across the bed of the river which originally no doubt caused it to take the course of the Tujong until the accumulation of silt and *detritus* raised the level of its bed and then the floods burst over this belt and forced a channel in the direction of what is now Patani.

Further down the river from Kuâla Nuchi is another small creek called Kuâla Lĕmbu, which cuts across the angle formed by the Tujong and Patani, and thus further connects these two streams. The rough sketch map attached shews, to a certain extent, the ramifications of this delta.

In reference to the term Kuâla it may be well to mention that, as in the case of the Tujong, it is applied indifferently either to the opening where a stream debouches on the sea or falls into another river, or to that whence it breaks off from another river; this is common in Malaya, and a knowledge of the fact is necessary to prevent confusion when perusing any description of these rivers.

The town of Patani is situated about two miles up from the Kuâla and is of considerable importance; a very fair amount of trade being carried on with Singapore and Bangkok, as also with the neighbouring Siamese and Malayan States. It exports tin, lead, gutta, salt fish, tiles and earthenware, and occasionally timber. The population of the town, consisting of Malays, Chinese and Siamese, I should estimate roughly at from three to four thousand, but up to the time of my departure (September, 1881) no proper census had been taken, and none of the authorities could give any precise information on the subject. The Malay race preponderates. The town has a Chinese and a Malay quarter; the Chinese quarter consists mainly of one tolerably good street running at a right angle with the river; a large covered gateway substantially built of brick or stone and plaster opens from the river bank into this street and many of the houses which are used as shops and residences combined are of the same material and well constructed.

The Malay quarter lies a few rods further up and is more or less straggling, although the frontage to the river is lined with houses at moderate intervals and an almost continuous fence stretches as far as the Râja's landing place about a mile further up.

The Râja's palace or residence is a rather handsome one-storied building situated about a furlong from the river, it is built of brick plastered, and the roof, which is tiled, is decorated in the Siamese fashion, which much resembles that of the Chinese, if indeed it is not altogether borrowed therefrom; it has an extensive court and very wide double verandahs at front and sides, the floor of the inner one being raised a step above that of the outer; both floors are handsomely laid with large squares of polished tiles, and the roof is supported by numerous massive pillars, which give to the whole a rather imposing effect. Here the Râja holds court, receives visitors, and deals out judgment; the dwelling rooms are partitioned off by tall wooden screens extending from floor to roof corresponding with the form of the building (quadrilateral) and elaborately carved, coloured and gilt. The Râja is a young man of very gentle manners, and advanced ideas, and administers the affairs of his province with much ability.

The active commercial and shipping business is controlled by a Captain China, who combines in his person many offices; he is shipping master, collector of customs, collector of inland duties, and Magistrate absolute in cases of disputes among the Chinese.

There is another important officer in Patani, the Datoh of the mines, CHEW BENG by name; he is also the opium farmer. He is a man of great force of character, and exercises more power throughout the Patani provinces than any other individual in them: he is elder brother to the Captain China, and both, as well as the Râja, are under the immediate control of Singora.

The people are quiet and comparatively industrious, but a not inconsiderable portion of the town labour is left to the women, who may be seen plodding about a great part of the day with loads of various descriptions balanced on their heads.

There is a goodly company of Siamese priests in Patani, and it is one of the sights of the place to watch them of a morning in companies of twenty or more arrayed in their robes of yellow calico marching in Indian file through the town to receive their daily alms, visiting from door to door with great solemnity, and headed by a kind of high priest before whom is borne a long gold or silver headed staff or rod. Their robes are worn much as the Kling Chitties wear their white and airy costume, but are much more voluminous, and under the ample folds of these they carry large baskets in which are deposited the voluntary contributions of the people. Few, if any, words are exchanged as the yellow regiment proceeds on its house-to-house visitation, which is conducted in the most perfect order, and, generally speaking, the inhabitants are all in waiting outside their doors with their offerings of rice, fish, cakes and other food. This is part of their religious system and seems to be cheerfully acquiesced in even by those who are not of the Siamese persuasion. Celibacy is a strict law of the priesthood, and I was informed that for one of their order even so much as to touch one of the other sex is a high offence.

Many youths even of good families, such as sons of the Râjas in the Siamese provinces, enter the priesthood for a period (a kind of noviciate) in order to be inducted into the mysteries of their religion, as also to receive a good education, and, as a rule, the education of the Siamese youth is, to a large extent, entrusted to the priests.

The Siamese dialect is very much used in Patani and is spoken fluently by most of the Chinese and also by many of the Malays; it is the official language of the country and must be used in all communications with Singora, where it is exceedingly difficult to find anyone who can talk Malay.

The traffic on the Patani is principally carried on by means of long flat *prahus,* chiefly made in Kĕlantan; they are decked right over the gunwale, and, fore and aft, two broad stages extend beyond the stern and bow respectively, whilst the centre is covered by a low deck-house about five feet in height at the ridge. This deck house is often about 20 feet long and is divided into two compartments, one for the men and the other for the master or *nakhoda,* the latter facing the forepart of the *prahu;* the entire length of these boats from the extreme end of one stage to that of the other is sometimes about sixty feet, and the width about seven; the fore stage is used as a platform for the boatmen or polers, and that at the stern for the steersman and also for cooking operations.

To a novice, the poling is a very interesting as well as a peculiar performance, and it is conducted on this river in a very energetic and systematic manner; there are generally four men employed, but, if speed is wanted, two extra are put on. The poles are from twelve to fourteen feet in length, and for deeper portions of the river even longer ones are used, the point is sheathed with a strong sharp iron ferule, which enables it more easily to dig into the gravelly beds of the river and also protects the wood from wearing. At the head of the pole a small block of wood is fixed in which is hollowed a slight curve so as to fit the breast of the poler; when the start is made, the first two men proceed to the bow end of the stage and digging their poles into the bed of the river, one on either side, place the block against the hollow of the chest just above the armpit, right or left according to the side on which the man is working; each then pushes with might and main, walking aft as the *prahu* is propelled along until he reaches the deck-house, then each lifts his pole out of the water. Meantime the other two couples have followed suit and are close upon the heels of those in front of them, each of whom deftly poises his pole so that the lower half passes over the heads of his followers whilst the upper portion crosses that of his opposite neighbour without clashing and in this manner the two walk sharply back to the bow and again take hold of ground, pushing as before; six men, three on each side of the comparatively narrow stage, going through this performance without a stoppage or a hitch, present rather a graceful spectacle; the action is rythmical and calls to mind one of the figures in Sir Roger de Coverley. Where the current is strong, there is a great strain upon the men, and every muscle shews out in bold relief, their eyes seem starting out of their sockets, their bodies are bent forward until almost horizontal, and with toes and hands they grip and clutch at every projection they can lay hold of to help to push and pull themselves along, often uttering all the while wild and unearthly cries, which are rather startling to the nerves when heard for the first time; it is tremendous labour, yet they will keep it up for hours, only stopping occasionally to refresh themselves with a quid of *sirih;* this pressure upon the chest, however, frequently brings on pulmonary complaints, yet the men who have once fairly gone in for this life will not settle down to any other kind of work.

During all the time this poling is going on, the passenger is "cabined, cribbed and confined" in the low deck-house; for he can't go out forward, or he would interfere with the polers, nor aft, lest he disturb the "man at the wheel" or the genius of the *dapor (i.e., cook).* However, at meal times, when the *prahu* stops, he has some respite, and at the close of day, when mooring for the night, comes compensation; a clean gravelly beach has been selected for the camping ground, the sun has sunk behind the jungle parapets, but the glorious tints with which he paints the sky as he retires to rest are mirrored and multiplied in the peaceful river and framed in the tracery of the primeval forest, presenting a picture of ethereal beauty ever changing under some fresh combination of coloured light, until purple shades and sombre hues begin to eclipse the ruddy tints and finally the view dissolves and Queen Night asserts her kingdom. Now the camp fires are alight, the *damars** are flaring, swarthy groups are gathered round the friendly blaze discussing the evening meal, the piercing ring of the cicala has made way for the voices of the frogs, and the night birds and the appropriate music of darkness has begun; bye and bye the moon begins to rise, and the traveller, having refreshed his inner man and lighted up the fragrant weed, contemplates the scene with a keen sense of enjoyment.

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* Torches.

These *prahus* are admirably suited for river traffic, and in some instances carry about a hundred pikuls.

From Patani to Kuâla Nuchi the river's course lies for some distance between extensive padi-fields, the banks clothed to a considerable depth with the feathery bamboo, the graceful cocoa-nut palm and other fruit trees; at short intervals the brown *ataps** of the native huts peep out from amidst the redundant foliage, tawny beauties gracefully draped in many-coloured robes gaze dreamily at us as we pass along, and, combined with the happy voices of children add life and music to the scene.

Further up the Patani lies Biserah, the principal river *kampong* of the Jalor province, distant from the town of Patani in a straight line about 25 miles, but double that, or even more, by river.

Within a couple of miles of Biserah is situated a remarkable idol cave to which I referred in my paper on Kota Glanggi published in this Journal (No. IX, June 1882).

It did not occur to me at the time of writing that description to state that the idols therein referred to are not carved out of the rock as in the caves of Elephanta and others of note, but are built of brick and stone and then plastered over. On coming to read the article in print, however, when I returned to Singapore, it struck me that it was an omission which might lead to erroneous impressions, and therefore I take this opportunity of explaining: the length of the cave, also, should have been printed 300 feet not 500.

The hill in which this cave exists is the first of a series of isolated cliffs which here begin to dot the plain and which are but the outposts of a regular and connected series of limestone ranges, precipitous, rugged and grand, which lie a little further to the south.

To the north-west, a bold mountain range with lofty peak rises abruptly out of the level country, and is, I should say, not less than 4,000 feet high, probably more, but I have not ascended it yet. It is known generally as Bukit Běsar; its base stretches over a wide extent of country, and from all the plains around, for a distance of twenty miles or more, and from some distance out at sea, it is a conspicuous and imposing feature in the view. About four miles from the idol cave lies Kampong Râja, or Jalor; here the Râja resides in a plain *atap* building. He is surrounded by a goodly number of native huts, and there is a considerable population. There are extensive padi-fields which are worked on a very good system of irrigation. The Râja of Jalor, to whom I am indebted for much kindness, is an oldish man; he possesses a goodly number of elephants from which he derives a considerable revenue; his country lies chiefly on the west bank of the river, although he also holds on both banks. About the same distance on the opposite side in a south-easterly direction, lies Kota Bharu in Raman, the seat of the Râja of that province. Râja RAMAN is a man of liberal ideas and exceedingly anxious to cultivate a knowledge of European manners and customs; he is a fair artisan and a Nimrod in the jungle.

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* Palm-thatch.

At his court, which, like that of Jalor, consists of a series of *atap* houses, are workmen skilled in the manufacture of spears, krises, *parangs* and other weapons; there are also good carvers in wood and workers in gold. The Râja himself makes very handsome *howdahs* of fine wrought *rotan* for his elephants, of which he has the largest number of any Râja in the provinces, as he is continually capturing and breaking in fresh ones. He made me a present of a very handsome *howdah* wrought by his own hands; he is affable and courteous, and any European visiting Kota Bharu may rely upon a hospitable reception.

Leaving this portion of the river, we now commence to penetrate into the wild mountain country of the interior, and as the river wends its tortuous way in and out amongst mountain ranges, many vistas of surpassing beauty open out to delight the eye; the river becomes more rapid, and beneath its rippling current may be seen clear gravel beds and sandy bottoms over which dart myriads of the finny tribe; occasionally bold rocky masses start out from beneath a mountain of foliage, and sheltered by these lie deep and silent pools, curtained with overhanging tapestry, wrought in all the wealth of colour and design which the luxuriance of tropical foliage so lavishly supplies. In many of these pools excellent fish are to be obtained, and, although I ought perhaps to blush for the unsportsmanlike procedure, it was customary with us, when ascending and descending the river, to summon all the natives within hail—men, women and children—and with the aid of a dynamite cartridge raise more fish of all kinds and sizes in five minutes than the whole tribes around us had seen for months: the rush into the water pell-mell, helter-skelter, of the whole crowd, and the shouts of glee and laughter, were something to see and hear, the women and children were particularly amusing, whilst the capture of the fish delighted them, fed them, and afforded us infinite pleasure to witness the unbounded delight which it occasioned.

Bukit Běsar beyond Jalor, already referred to, is of granite formation with upheaved schist and limestone and on the other bank above Biserah lie Bukits Bilau and Ko Pinang, both of granite formation largely intermixed with quartz; these are lofty mountains similar to Bukit Běsar, rugged and picturesque. On this part of the river are many high gravel beaches consisting almost entirely of rounded white quartz, sparsely intermixed with granite, schist, and limestone shales. Here the eye may travel from undulating range to range, rolling wave-like between these monarchs of the mountains, all taking one direction nearly due south. The strike of the schistose and limestone strata is, with slight variation, east and west, and the idea suggests itself of a vast plutonic ocean hurling its irresistible billows southward, breaking up into one regular system of fracture, the superincumbent strata, which, yielding to the impulse of the moving mass, have formed into the smaller waves of a shallower sea. I do not as yet venture to propound this as a geological thesis, I only mean to say that the idea suggests itself.

Passing through many scenes of this description, we reach Banisita, which is situated about forty-five to fifty miles nearly due south of Patani, although the river mileage is very much greater; Banisita is the depôt for the galena mines in this neighbourhood and is situated in a very picturesque amphitheatre through which flows the Patani river. In the centre of this amphitheatre there is an open level plain in which are many padi-fields, with a hill of forest encircling it; beyond this hill rise undulating wooded ridges; behind these again, at intervals tower vast walls of limestone cliffs; and still further in the back ground soar the lofty summits of the Raman mountains.

The floor of this amphitheatre, so to speak, is, as I have said, perfectly level; on one side of the open plain flows the river, the banks of which are here from fifteen to twenty feet high and quite perpendicular, so that an excellent section of the soil is obtained; it consists of decomposed limestone mixed with sand, forming a substance like pipe-clay with gritty particles of quartz and felspar, and makes, I was told, excellent pottery when properly prepared; it seems to have been deposited under still-water and has all the appearance of a lake or deep sea bed; probably in the course of its history it has been both. There are no large boulders in it, and, except close to the river bed, no gravel. Near the godown of the company this deposit rests on limestone, which crops up in the bed of the river.

The galena mines are situated between eight and nine miles to the west of Banisita. The journey is performed on elephants, of which there are trains constantly passing to and fro, nearly all the traffic being conducted by means of these invaluable animals. Buffaloes are likewise employed, but as each beast can only carry about 133 katis, whilst an elephant will take from three and a half to five pikuls, according to size and strength, the latter animal is much more profitable. About four miles out from Banisita, on the way to the mines, the traveller enters into the heart of the limestone country, long lines of perpendicular cliffs, all crowned with foliage, rear their serrate summits to the sky; some are over a thousand feet high, and throw out here and there from their rugged walls bold abutments from which depend huge stalactites that seem almost to hang in air; from the brows of others project spiked masses and needle-like columns crowded together in fantastic groups, like some vast *chevaux de frise*, and down their rugged walls, the prevailing white of which is occasionally varied by streaks of purple, blue and ochre, hang luxuriant tassels of creeper, fern and flower; high up on the precipices may be seen the denticulated jaws of many a cavern gaping at space, whose mysterious recesses no man may penetrate, for they are out of the reach of even the most enterprising goat.

Caves there are also on a level with the ground, through many of which one may travel for considerable distances.

As one approaches the galena mines, the road winds in and out among cliffs with clear rushing streams meandering at their base; and every here and there a glimpse is obtained of some narrow valley with its precipitous walls and hanging verdure.

One very striking peculiarity in the formation of the country here is the alternate succession of ridges or waves of limestone and granite; these limestone cliffs will be found cut down clear to the granite, the junction plainly visible; at the very base of the cliff a stream will be found running over a granite bed, and, gradually rising from this stream on the opposite bank, the slope of a granite range; on the other side of this range, again, will be found another series of limestone cliffs, and so on for many miles.

The cliffs almost invariably face the south, and the strike, or longitudinal line runs about east and west, or a little to the north of west and a little to the south of east, which would shew a south and by westerly direction of the general flow of country. The back or north sides of these cliffs present almost always a gradual rise; this rise consists generally of chaotic heaps of vast blocks of broken and disjointed rock. I use the term "vast" advisedly, for these blocks or mountain masses of limestone convey most distinctly to the mind the idea of a mountain-side having been simply churned into fragments by some violent plutonic action. It is an exceedingly difficult and tiresome feat climbing over these, as everywhere ugly crevasses present themselves, into which a false step may plunge the unwary; these rocks have edges as sharp as knives, and a false step or a careless movement may cost the climber's shins a considerable strip of epidermis. At the base or north again of this rise will be found granite ranges, steep to the south, but sloping to the north. Now, if we consider these granite ranges, for the sake of illustration, to be the waves of some vast plutonic sea which, rolling its course along, has lifted and broken up the limestone strata and pushed its way southwards (the crests of its waves standing high above the country which originally covered them, and, as we see in the waves of the ocean, the back-water sloping gradually in the direction from whence it came), we can conceive the limestone, following a similar impulse, would present a crested or vertical front, whilst the back flow would be represented by the chaotic debris above referred to, lying at a comparatively low angle. Now, at the galena mines this is not a solitary occurrence; it is frequent and systematic; wave of limestone succeeds wave of granite for many miles. Without, however, attempting to dogmatise, it may have been that an undulating earthquake really did travel the Peninsula from north to south, or it may be that a simple upheaval took place and rose, so that there should be a systematic and regular alternation of granite and limestone ridges, ridge upon ridge of granite rising just so that at the back of each ridge should lie a corresponding ridge of limestone.

But, whatever may have been the nature of the movement of the forces which disturbed this country, the phenomena related undoubtedly exist. These remarks are the result of long and careful observation.

In the valley of Goa Tumbus, there are several isolated limestone peaks and the one from which the valley takes its name—Goa Tumbus—is perforated from one side to the other by a large opening giving the idea of a gigantic gateway. This rock or hill is not less than two or three hundred feet high, and the opening is probably about one hundred feet high and about four hundred feet in length. The interior of this opening would make a magnificent hall; it is well lighted from both sides, and the openings are festooned with creepers and other vegetation; it is perfectly dry, and as one stands in the middle of it, the look-out from either side presenting a long vista of rich green forest, produces a very striking effect.

Among other eccentricities of the limestone formation, I have occasionally met with in some of the caves a very beautiful phenomenon—petrified cascades or waterfalls; such the eye would at first declare them; they are, however, merely the drippings of lime-impregnated water which, falling regularly from the ceiling, happen to have lighted on stones presenting many successive layers, and, falling or sliding from one to the other, the deposit of limestone has gradually formed into this shape, and the rounded and sprayey volumes of a cascade are imitated with a fidelity which is startling.

Imagine the time one of these cascades must have taken to accumulate, and yet, as compared with the rocks themselves, they are but things of yesterday. In one cave on Penyu there is a very fine specimen of this kind; it is semicircular and about fifteen feet high, the fall is symmetrical and the resemblance to a cascade complete.

In Tilowaya Jalor, the river Gorah runs right through part of one of the loftiest limestone mountains in the country, it seems to take a corner of the mountain and flows through a long succession of caves. I followed it from one end to the other, here and there there were smaller passages, which again opened out into wide caverns alive with bats; it has a peculiar weird sensation this wandering through long galleries of gloom with the rippling and splashing of water for ever sounding in the ear and echoed and re-echoed from the vaulted ceilings of the caverns in a never ceasing *swish! swish! swish!* which is both monotonous and eerie, whilst the air is permeated with the all pervading and though muffled yet powerful sound produced by the flutter of untold myriads of wings.

There is one striking and suggestive phenomenon in connection with all these limestone cliffs; they all bear the indisputable marks of the action of water from the extreme summit to the base, there are innumerable round and deep holes smooth and symmetrical as if worn out by the eddying of the softer element, there are ripple marks and smooth hollow grooves and these are not at any great distances from each other, but are met with at every step, they are not peculiar to one range alone, but are found on all, and indicate a general submergence and a very slow and gradual rise, or *vice versâ.* I am inclined to ascribe these phenomena to the action of the sea and not to that of stream or lake. There are frequent instances of large rocks more or less pyramidal in form, rounded at the angles and each face smooth and slightly concave just such an effect as the action of the tides would produce; in the caves, and overhanging ledges the roofs are worn in long and wide smooth grooves as if from the constant lapping of the waves, and there are rounded protruding benches evidently proceeding from the same cause, these cannot be ascribed to foldings of the strata as is the case in some parts of North Devon. Here in Patani the limestone is crystalline and entirely altered so that all signs of stratification are in most instances destroyed. Although there are some formations which are less altered, and where these occur we find the strata dipping at a low angle to the north and tilted up to the south as previously described. During my investigations I was unable to obtain any evidence of organic remains. I found no fossils, and I concluded that in the process of metamorphism they had all been destroyed. It is but fair to say, however, that I have since been told by Mr. C. M. Allen, who was engaged at the galena mines some years ago, that he had obtained small fossil shells in the limestone, but, so far as my experience goes, neither with the naked eye nor with the aid of the microscope was I successful in discovering any evidence whatever of their existence, although I searched long and laboriously.

It may be conjectured from the continuous signs of water-wearing, not occurring at spasmodic intervals but in a gradual scale of ascent or descent, and also from the very distinct nature and extent of the watermarks, that this country must have occupied long ages in its emergence from above the ocean level, otherwise the water would not have had time to leave such decided traces of its action from summit to base. Of the nature of these limestone cliffs, I may say that there are white crystalline marbles not unlike loaf-sugar, there are blue compact limestones, occasionally in the lower ground dark compact stratified and highly indurated shales, but the mass of these cliffs, where exposed, is of a white crystalline character, much interspersed with lodes or fissure veins of felspar and quartz.

The felspathic crystals often occurring in large cubes, three and four inches square. The limestone when in flat bevelled slabs often gives forth a clear bell-like ring when struck by the hammer and when in large masses of this form it produces a deep rich tone like a powerful gong.

In the limestone ranges there are many veins of galena more or less productive and generally associated with quartz or felspar. Whether they are fissure veins belonging merely to the limestone formation, or parts of a distinct system which has its origin in the underlying granite, is a question that may be considered still open, but during long and careful observations, extending over a period of fourteen months, I did not find any traces of galena veins in granite itself. I found, however, that there existed a distinct mineral band or belt, about two miles in width striking south and by west, and within this belt, these veins of galena were frequent, whilst the largest and most productive lodes, although each series was broken and disconnected by the intervening granite, were found running in one straight and clearly defined line in the same direction, although not necessarily having all the same direction of strike, the contortions of the limestone causing the same lode to assume different bearings according to the displacement of the rock.

If the reader will glance at the rough sketch map, he will note to the north in the Goa Tumbus Valley the words "Great Lode;" this is a wide strong lode of lead with copper and iron pyrites, and extends downwards into the shales which exist at this place; from thence draw a line to "No. 3" which is in the limestone on the other side of the intervening granite, this is also a strong lode of the finest galena, not yet traced to shale, but cased in crystalline limestone; from thence again in the same direction draw a line to the place marked "Kim Ching Valley" and here again occur numerous veins of galena whilst a hill of granite intervenes between this limestone and that of No. 3. Galena is also found on the opposite valley in the same direction, granite again intervening.

Further to the north-west in the valley of Goa Tumbus draw a line from the point where a large lode is marked as cropping up in the stream, this is also more or less in shales and highly impregnated with pyrites; now draw a line from this in the same direction as the previous one and it will be found to cut the point marked "No. 1 Mine," which was the largest lode of galena that has ever been discovered in Malaya and of first quality; continue the line again and it strikes at the head of the Kim Ching Valley where a series of rich lodes exist to the present day. I may remark that these lodes occurring in the crystalline limestones contain silver in proportions varying from 23 to 66 oz. to the ton.

The tin deposits which in this part of the country are mostly worked on the hills, will also be found more or less to follow the same line of strike, as for example from the hill in Goa Tumbus Valley marked "Chew Beng's Mine" a line in the same direction cuts "Epoh Mine" on the next granite exposure, and again on the line marked "Tan Lim," whilst again, further to the north-west, the same continuity exists; thus a clearly defined mineral band striking from the east of north to the west of south would appear to be established, and, as I have before remarked, it is a question whether this apparent continuity arises from impregnation from the plutonic rocks or is the result of crystallisation in a particular line of magnetic current or other procuring cause.

In other words, did the infusion, infiltration, crystallisation or whatever the process which superinduced the formation of the galena (sulphide of lead) occur when the limestone was one level mass or after or at the time of its disturbance, or, on the other hand, are the existence of all the minerals here to be attributed to impregnation or metamorphism produced by the plutonic rocks? As I have before stated, I have found no galena veins in the granite ranges themselves. I have found the galena when embedded in the lower shales highly impregnated with pyrites and minus silver and I have found the purest galena and the best yield of silver near the summits of the limestone formation.

I have often heard it stated in Singapore that the galena of these mines exists in pockets in the alluvial or earthy soil which was apparently assumed to be its natural habit; the actual fact, however, is that whilst it is found frequently in what we call pockets imbedded in clay and earthy soil, yet in this phase it is not *in situ*. When so found it is in the form of more or less rounded boulders of pure galena encrusted with a thin coating of limestone or of carbonate of lead, these boulders I have seen as heavy as six and seven pikuls each; and as much as seven or eight hundred pikuls was obtained in more than one instance whilst I was there from pockets of this description. Now I have never known any of these so-called pockets in the immediate vicinity of which, that is, within a yard or two or even immediately beneath or above them, there has not been found to exist a lode *in situ*, and the simple explanation of the existence of these boulders of galena is that they are merely the result of the breaking away from the overhanging rocks of some of these veins of galena which becoming gradually severed from the mother rock by the insidious action of the water in the still depths of the ocean, have slid down to the nearest projection and there have been until the day of discovery, their great weight and size having defied the efforts of flood or stream to disintegrate or carry them away. They may, however, have been detached from the matrix by other forces of nature, such as the undermining of waves or streams or by atmospheric action, but the principle of their existence is the same, however detached from the parent rock, whilst the coating of lime gradually formed around them has, to a large extent, prevented their disintegration. After exhausting these accumulated heaps of galena, the lode itself has been found to continue its downward dip and has been followed to considerable depths with much profit to the miners; in these cases, the upper portion of the lode had broken off, whilst that below being embedded in the rock could not be affected.

There was one remarkable instance of this at Pinyuk on the galena mines of the Patani in which the lode was not exhausted after twelve months' work, but still held its downward course through the living rock in conjunction with galena.

Galena being of a very friable nature, is, if not in a compact mass, easily disintegrated, and consequently on all these hills and in the limestone valleys, *i. e.*, in valleys where the entire formation is limestone, there are large deposits of alluvial galena which can be extracted by washing the drifts.

There are to be found here considerable deposits of carbonate of lead and also of phosphate of lead, and some very beautiful specimens of the former are often met with. Copper in the form of pseudo-malachite is also of common occurrence.

Tin is also more or less abundant on the granite hills and slopes, and is worked by the Chinese with considerable vigor, almost always on the hills; it is also plentiful in the beds of the rivers which flow between the granite and the limestone cliffs, and it is a peculiar circumstance that very little alluvial galena is found in these same streams, a phenomenon which seems to indicate that the surface changes in the rocks have not been the result of river denudation and the watermarks on the limestone hills have not been produced by such action, for had the valleys been scooped out by that process, galena would undoubtedly be found in the beds of these streams in even greater proportions than tin, for its superior specific gravity would enable it to hold its own against the currents and prevent its being carried away to any great distance, whilst the fact of its abundant existence *in situ* on the very verge of these rivers leaves no room for doubt that had there occurred such a process of denudation ample deposits of galena would have resulted.

These rivers are fed from the slopes of the granite ranges which at one time have been and may be even now, extensively reticulated with thin veins of cassiterite, or tin stone, which, during the erosion of ages has been freed from the parent rock and carried down by the watershed. The tin found in these streams is generally of a very pure quality, but very small in grain. The richest tin mines in Patani are held by Datoh Chew Beng and are very profitable. As before stated. Tin is found in large deposits on the tops of hills bordering the great lines of granite ranges. These hills are composed of a reddish brown sandstone, soft and spongy near the surface, "Batu Mati" as the natives call it, *i. e.* "dead stone." The Chinese call it "Seeow." Both above and below this, good tin is obtained, but the lower strata often contain wolfrum, *i.e.*, tungstate of manganese and the sandstones which become harder the further the distance from the surface are highly impregnated with iron and manganese, hence many Chinese *kongsis*, who have for years been working and smelting the surface tins with great success, are often very much perplexed by suddenly finding, upon reaching deeper ground, that their ore no longer yields bright tin but only a cindery looking slag.

The tin-bearing hills are worked by means of water races brought from the mountain streams high up the granite ranges and are frequently constructed at great cost and brought from considerable distances, along the sinuous contour of the mountain spurs. Having obtained a good and constant supply of water, the stream is turned on to the stanniferous ground, which is broken up by the miners by means of chocks. A chock is a kind of crowbar; it consists of a long, heavy, thick-pointed, spear-shaped iron head with a socket, in which a strong shaft of wood is fixed, it is very heavy and the miners sim ply lift it vertically and then plunge it into the rock or earth releasing a considerable quantity at a time, and this, falling into the stream which is made to deviate so as to follow the miners, becomes disintegrated and is washed down the hill, to a lower platform where a good deal of the tin remains whilst the debris continues its course down the hill and passes through sluice boxes where any remaining mineral is retained. The existence of these deposits of tin often very rich on the summit of hills which are in many instances isolated rising up all round above the ground immediately surrounding them, is a phenomenon somewhat perplexing, and must at once attract the attention of the observer, but what is still more perplexing is that these deposits of tin will be found mixed or coexistent with deposits of carbonate of lead as in Datoh CHEW BENG's mine at Goa Tumbus marked on the sketch map. On this hill there are distinct deposits of tin of fine quality alternating with deposits of carbonate of lead. Space will not admit of my going fully in this paper into the mineral phenomena of the country, but I may state that the general result of my observations through Patani was that the chief, if not the only factor in the distribution of the alluvial minerals has been the ocean, and that river denudation has not in its most recent phase affected the present contour of the country or the deposit of mineral except where existing in the rivers to any appreciable extent.

It may be that the deposits of tin are entirely prehistoric to the formation of the limestones and, therefore, to the subsequent changes of the surface, and it is possible that a stanniferous hill like Datoh CHEW BENG's may, when beneath the sea, have been subject to the action of under-currents and swirls which have eroded the surface without carrying away the mineral, and being, as it is, in close proximity to lead-bearing limestone, the carbonate of lead, which is lighter than galena, may have been carried by such currents to the site of the tin deposits; carried it must have been somehow or other, for there it is, but no river could have brought it.

Above Banisita, there are some stiff rapids and the river passes through mountain fastnesses presenting some of the wildest and most attractive scenery that the mind can conceive of; lofty mountain walls rise perpendicularly from the water's edge and along the line of vision vistas of cliff, rock and foliage, all mingled in picturesque confusion afford a rich succession of dioramic views, and as evening approaches one may occasionally descry in the far distance some isolated limestone peak suddenly jutting island-like from amidst the sea of jungle, its saffron-tinted crest illuminated by the sunset and gleaming like a topaz from out the emerald setting of the surrounding forest.

Indeed it may be said of the limestone country of Patani that it is a scenic kaleidoscope of Nature's choicest construction.

WILLIAM CAMERON.

LATAH.*

A FEW words upon this mysterious and unexplained mental anomaly, so common amongst the inhabitants of the Straits Settlements and of the Malay Peninsula, will not, I hope, be thought out of place in the pages of this Journal.

I must premise that I write without any of that special knowledge which would be valuable as bearing upon the pathological side of the subject, and also with a Malayan experience strictly limited by my acquaintance with the inhabitants of the Peninsula from Kĕdah southward to Singapore. I am encouraged, however, to put upon paper the result of my own observations with regard to *latah* by the fact that none of what I may call "the stock" writers upon Malayan subjects seems to have noticed this very noticeable form of disease in any detail; and I am further influenced by the hope, that those better qualified than myself, both by width of experience and by scientific knowledge, will now be led towards the elucidation of phenomena, interesting to most and experienced by all of the residents in this part of the world.

In the few remarks which I have to offer upon the peculiarities of this disease (so I must call it for want of a better term), I purpose to limit myself to those facts which have fallen under my own personal notice and I shall also restrict myself to an account of its exhibition amongst Malays proper. †

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* It has not escaped me that the word *latah* has been used all through this paper in defiance of all rules of grammar. But I have thought it best not to confuse those who may not be acquainted with the Malay language, and have accordingly used the word *latah* throughout as both adjective and substantive.

† By this term I would include all branches of the Malay race with which I am acquainted.

I thus define my object, so as to bring what I have to say within the very narrow limits of a paper written (without preparation and at short notice), rather with the view of throwing out suggestions for the consideration of more capable observers, than as pretending to a tolerably exhaustive treatment of a wide subject.

Lest I should be supposed, however, even after this explanation, to maintain that *latah* is peculiar to those of Malay origin, I must state parenthetically that, in my search after this peculiarity, I have found it, outside the Malay race, weakly exhibited in a very small percentage of Tamils, and strongly exhibited in an equally small proportion of Bengalis. I have noticed traces of the disease in two so-called "Sikhs," and, curiously enough, the most marked sufferer I have ever met was a pure Nubian, whose appearances in these waters, as fireman on board an Ocean steamer, were few and far between.

I have never observed a trace of the disease in any member of any of the Chinese races resident in the Straits. The consideration of the questions of race and latitude as bearing upon *latah* would lead me now too far a-field. I hope to treat this branch of the subject in a future paper, but here, as I have said, I have to do with *latah* amongst Malays only.

What is *latah?*

The derivation of the word seems veiled in the obscurity which covers the origin and nature of the disease itself.

I do not find the word in MARSDEN at all; FAVRE explains it by "indisposition nerveuse chez les femmes, dans laquelle elles "disent tout ce qui leur vient à la bouche."

A more modern lexicographer translates the word as "ticklish," and another recent etymologist connects it, in defiance of spelling, with *melata* to creep. This bold derivation will commend itself, I fancy, chiefly to those classes of English-speaking ladies who connect "nervousness" and "the creeps," but this ingenious surmise, even if correct, only throws the difficulty one step further back.

I can find no derivation which satisfies me either for *latah* or for *melata*.

And now as to *latah* itself, derivation and origin apart.

The Malay acceptation of the word is very wide. It includes all persons of a peculiarly nervous organization, ranging from those who, from their mental constitution, seem absolutely subservient to another's will; down to those who appear merely of a markedly excitable temperament.

A pathologist would of course—and I trust I may now say will—differentiate and classify the different degrees of this mental peculiarity. As a non-scientist, I am content to treat the subject in the broad light in which it is presented to the Malay mind by their own unscientific and comprehensive word *latah.*

I suppose I am not taking too much for granted when I assume that, by this time, the general character of the Malay is more or less understood by the civilised world. He has recently been called "the Irishman of the East," with more happiness than generally marks the definitions of "Our Special Correspondent."

The only point of resemblance between "this and that," upon which I would lay stress here, is the intense impressionability of the Malay.

Externally impassive the Malays are, as a race, but no one can long have had intimate dealings with them without being struck by their extraordinary susceptibility and peculiar sensitiveness to the influence of what we should call the accidents of every-day-life.

No man, *pace* all Irishmen, is more "touchy" than a Malay.

It is this nervous impressionability which leads to those mysterious *vendettas* and unaccountable *amoks,* which so often place the European completely at fault in dealing with this otherwise charming and loveable people. And it is this intensified nervous sensibility which is, I am convinced, at the base of the peculiarity of which I have to speak. I think it will best serve the purpose—the admittedly humble purpose—I have in view, if I begin at what appears to me to be the bottom of the whole of the phenomena I have to notice, and to work up to the top, noting the divisions into which these phenomena seem naturally to fall, without any attempt at their scientific classification.

Class *A*.

In this class, I would place those subjects who appear to be affected merely by such excess of nervous sensibility as is exemplified by starting unduly at the sound of an unexpected and loud noise, or at the sight of an unexpected and distressing or alarming incident.

So far, it might be said that, under parallel circumstances, a similar exhibition might be expected from any unit of any nation of the human race. But, having observed Malay *latahs* on numberless occasions under the above conditions, I have noticed two peculiarities which seem to differentiate the mental shock which they undergo from that which Europeans experience under like circumstances.

Firstly, their irresistible impulse seems to be to strike out at the nearest object, animate or inanimate, and, secondly, their involuntary exclamation is always characterised by what I must call obscenity.

I cannot here enter into any particulars of this latter characteristic, but, so far as I have observed, and I have observed with careful interest, this element is never absent from the cry of a startled *latah*, who may, on ordinary occasions, appear the essence of propriety.

I touch upon this point, because I believe it to be noteworthy, and when I come to speak of some of the peculiarities of *latah* women, I believe I shall be pardoned by those who may be interested in the pathological view of the question.

Class *B*.

In this class, I would place those sufferers whose nervous emotions are unduly excited without apparent, or, at all events, without adequate cause.

To proceed at once to illustration,

I have more than once met with river boatmen, who, when the word *buaya* (alligator) was mentioned, even in the course of casual conversation after camping for the night, would drop whatever they might have in their hands and retire cowering to the cover of the nearest *kajang*.

I have enquired into every case of this description which came under my notice, and in no case could I learn that the man had any special reason for his terror in the way of a personal experience. His friends explained that he was *latah*, and that to them explained everything.

On one occasion, after a curious exhibition of this description, I shot an alligator on the bank next morning. The *latah* was, to my surprise, the first to approach the saurian. Against my earnest entreaties, he proceeded to pull the creature about, and finally forced its mouth open with a piece of firewood.

His persecutors, his fellow-boatmen, stood at a respectful distance.

An hour afterwards, as he was poling up the river, one of the crew called out to this man *buaya!* He at once dropped his pole, gave vent to a most disgusting exclamation, and jumped into the river—an act which shewed that his morbid terror was quite unconnected with what might be supposed to be its exciting cause.

More than one man have implored me not to mention the word *harimau* (tiger), and more than one have gone nearly insane with terror when the word *ular* (snake) was spoken "at" him.

In each case of this description, my Malay companions solved my perplexity, at times very great, by saying "dîa latah, tuan."

Similar cases must be familiar to many who read this Journal, but the instance I have quoted of the man who became limp and nerveless from terror at the mention of the word *buaya* and who afterwards was the first to handle a *buaya*, of whose death no one was assured, presents a curious mental contradiction, of which I await the explanation.

I may add that a *pawang* (medicine-man) who exhibited extreme distress at my mention of the word "tiger," was one of the few men I have met out here who habitually passed nights in the jungle alone. There was here no question of the superstitious reverence which Malays have for this animal, or of their dislike to hearing it called by its regular name. The man's fear was *latah*, and his friends, though apparently much amused, told me that this was his peculiarity, and I was careful not to offend again.

With regard to snakes, perhaps the horror with which these sufferers hear the word, is more marked still.

Such cases, however, as I say, must be familiar to most readers of these pages. The class of cases in which those afflicted are led to believe in the actual presence of a reptile, where the sane only see a bit of string, or a piece of *rotan*, belong to another—the fourth—division of my subject.

CLASS *C*.

To this class seem to belong all those persons who, without encouragement, and involuntarily, imitate the words, sounds or gestures of those around them.

These *latah* subjects cannot, I think, be widely classed under the head of "village idiots."

Their disease is, I have gathered from experience, as a rule, spasmodic, by which I mean that it is marked by intervals of mental regularity, while all other phases of this complaint are, so far as I have observed, persistent.

This imitative propensity is often combined with the other characteristics of *latah*, but I have marked many cases in which it stands by itself.

I have tried, but tried in vain, to lay down any rule for the periodicity of these attacks. They appear to vary in the period of their recurrence, not only as regards one *latah* compared with another, but also in the case of any individual sufferer.

Here I may remark, that the Malays themselves draw a distinct line between *latah* and insanity proper.

Their definition of the narrow border line which separates madness and mental health, does not satisfy me, still less would it satisfy those kindly moralists who contend that all men are, to some degree, insane. But I am dealing with a Malay subject as treated by Malays, and therefore draw attention to the fact that nothing can be more distinctly defined than their several attitudes towards an *orang gila* and an *orang latah.*

A strong case of this division of *latah*, which has come under my notice, was as Kuâla Jumpol, when I was crossing the Malay Peninsula in 1875.

I there met a young Malay who was of material assistance to our party in pulling our boat across a narrow watershed into the Thi Sureting. His comrades told me the man was *latah,* but I could see nothing in his conduct or conversation which was not perfectly rational.

Some twenty-four hours after making his acquaintance, one night we let off a signalling rocket for the amusement of those who had given us assistance (none of those present had ever seen a rocket before). I was preparing to fire a second rocket myself, when the *latah* pushed me violently aside, snatched the torch from my hand, fired the rocket, and fell down on his face making an unintelligible noise, to all appearance the expression of fear.

I was somewhat startled, such rudeness and violence being quite foreign to the Malay character. When I sought an explanation from the by-standers, I was informed laconically " *latah, tuan.*"

Next morning when I met this man, I found him perfectly rational and perfectly respectful.

I saw him standing alone on the bank as we put off down-stream, and I waved my hand to him. To my surprise he began waving his hand frantically in return, and continued to do so till I lost him at the first bend of the stream. I had began to whistle an air. He also began whistling. His imitative faculty did not quite lead him to a reproduction of the tune, but the fact of an up-country Malay's whistling at all is sufficiently remarkable. As I rounded the bend, I saw him still waving and heard him still whistling. The steersman to whom I turned came out with the stereotyped formula " *Día baniak latah, tuan.*" I hope my poor friend's exertions ceased when their exciting cause passed out of sight.

A Malay woman, of respectable position and exceedingly respectable age, was introduced to me some time ago as a strong *latah* subject.

I talked to her for at least ten minutes, without perceiving anything abnormal in her conduct or conversation. Suddenly her introducer threw off his coat. To my horror, my venerable guest sprang to her feet and tore off her *kabayah*. My entreaties came too late to prevent her continuing the same course with the rest of her garments, and in thirty seconds from her seizure the paroxysm seemed to be over.

What struck me most in this unsavoury performance was the woman's wild rage against the instigator of this outrage. She kept on calling him an abandonned pig, and imploring me to kill him, all the time that she was reducing herself to a state of nudity.

One more instance:

I have met a man several times lately who is a very strong *latah* subject. He is cook on board a local steamer, and is naturally (alas, for human nature !) the butt of all the crew, who daily and almost hourly exercise their clumsy wit—the wit of sailors *plus* orientals—at his expense.

All this skylarking, however, had a tragical ending the other day, which illustrates the point of which I am speaking.

This cook was dandling his child forward one day ; one of the crew came and stood before him with a billet of wood in his arms, which he began nursing in the same way as the *latah* was nursing his baby. Presently he began tossing the billet up to the awning, and the cook tossed his child up also, time for time. At last, the sailor opened his hands wide apart and let the wood fall upon the deck, and the cook immediately spread out his hands away from the descending child, who never moved again after striking the boards.

A parallel case will at once suggest itself to all old residents in Singapore, where a Malay *latah* ayah, who saw her master tear up a letter and throw it out of the window, promptly threw a basket of clean clothes which she was carrying out of the opposite window, with the simple apology that she could not help doing so.

These illustrations may be thought trivial and unworthy of a grave subject. I have not selected these four instances from a host of similar personal recollections without consideration.

Two exemplify the mental warp I have attempted to describe, as entirely upsetting all Malay ideas of decency and propriety.

The third seems to shew how this imitative impulse may, on occasions, override what is admittedly one of the strongest feelings in all matured minds.

And the fourth—well—the fourth is a true story, amusing, if embarrassing in its results, and illustrative of the same mental condition as that in the more tragical story which preceded.

Class *D*.

The phenomena which belong to this division of my subject seem to call for the skill of a Mesmer to elucidate.

I shall content myself, as before, with simply stating what I believe to be the facts of the case, and leave theory to those who come after me.

I have repeatedly been brought into contact with Malays afflicted with *latah*, who, without any effort on my part, have at once and completely abandoned themselves to my will and powers of direction.

I have, at different times, tested my power over many of these subjects, in every conceivable direction, and I have satisfied myself, in each case, that my influence over the diseased mind was practically without limit.

As I cannot claim for myself any special strength of will, I am consequently led to the conclusion that the abandonment of self-control depends upon the mental weakness of the patient and not upon the will-strength of the agent.

By this I mean to convey that every *latah* subject of this class is under influence of others, not so afflicted, to approximately the same extent, and that this influence is not proportional to the varying force of character of the different individuals who may choose to exert it.

I am tempted to supply instances of this phase of *latah*, but I refrain from doing so advisedly. The proof of what I have stated is in every one's hands, but I much question the good taste of anything of the character of an experiment in this direction, unless for a purely scientific purpose.

I have not myself experimented upon a *latah* for some years, and I have never done so without subsequent regret.

For it must be remembered, that the patient who at one's bidding stands on his head, picks up a red-hot piece of iron, or strikes a bystander twice his own size in the face, is perfectly conscious of the mental abasement which he is exhibiting, and resents his degradation most intensely.

I have always felt, however, that such exhibitions degrade the European as much as they do the Malay.

The last division of the subject which I have to notice here, is the manifestation of the disease exclusively amongst women. The popular character of this Journal forbids my entering into details or illustrations under this heading.

Still I think I may, without seeming unduly realistic, so far touch upon sufferers of this class as to complete my review of the whole subject.

Latah, while happily rare amongst young women, is common amongst those of mature age, while of old women a largeish percentage is affected.

In the younger sufferers, as might be expected, there is found an entire absence of "virtue" and moral self-restraint (seldom a prominent characteristic of Malay belles).

But it is very startling to find that the disease, where present in females of advanced age, manifests itself, when set in action in the same direction, in a way which seems entirely to contradict the accepted laws of our bodily constitution.

That a word, a look, or a gesture can in a moment lead a woman of seventy-five to conduct herself like a hetaira of twenty, is a phenomenon so opposed to natural laws, that I seek in vain for its satisfactory explanation.

I have already remarked that the exclamation of a startled *latah* is always characterised by indecency, and connecting these two extremes of my subject, I cannot but think that the whole of this mental anomaly might possibly be traced to some structural peculiarity which has hitherto escaped the specialist's attention.[*]

H. A. O'BRIEN.

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[*] I have been collecting for some time past cases as regards *latah* subjects who have also committed *amok*, but facts I have collected are as yet too sparse for me to venture upon any matured generalization.

That the mental fact underlying the two "diseases" are identical, I have no sort of doubt, and I hope to be able soon to shew that this is so by those valued figures which cannot lie.

At present, however, whether from defective information, or from wilful misinformation, here is a flaw in my premises which destroys, as far as Arithmetic is concerned, my whole induction.

THE JAVA SYSTEM.

A new edition was recently advertised of Mr. MONEY's book "Java; or, How to Manage a Colony (1861)," and the work deserves to be read by all who are concerned with eastern administration. It was written with a hearty appreciation of the many excellent points in the Netherlands Indian Government, some of the best of which—the village-police system, for example—originated in the brief rule of the English and Sir S. RAFFLES. Mr. MONEY drew a wholesome moral, and one which has since been recognised to some extent by the Indian Government, out of "the wide-spread "misery and discontent arising from our plan of making the "debtor's land liable to be sold to pay the creditor's claim," com-"pared with the Java method, under which "the Native nobles "have never been subjected to such losses by the operation of "laws unsuited to their state of society:" and again in contrasting our annexations in Oude, &c. with the Dutch adherence to old treaty engagements in Java. He points out that they became the protec-"tors and the real rulers of the Preanger about the same period of "last century that we adopted those functions towards the Nawabs "of Bengal and the Carnatic. The Preanger has ever since been as "much in the Dutch power as Bengal and the Carnatic are in ours. "But to this day the country is governed by the descendants of "the Native princes with whom the Dutch treaties were made "............ In pecuniary difficulties, almost in bankruptcy, the "Java Government sternly withstood the temptation of relieving "their wants by annexing the Preanger and by taxing its inhab-"itants."

The greater part of the work deals with the "culture system" of Governor-General VAN DEN BOSCH (1832), and much of RAFFLES' prior reorganisation was necessarily modified by its introduction. As to these changes, the financial results have been most successful;

and, in some respects, such as the abolition of the "ryotwary" tenure, it may be conceded that the new methods were altogether an improvement on the old ones. Taken as a whole, Van den Bosch's experiment was a great and striking success, which, as a new departure, deserves all the credit which Mr. Money has given it. None the less it is questionable whether, in working out the experiment, Van den Bosch's successors have not paid too much regard to its fiscal aspects, and too little to other considerations ; and it may be added that any comparison at the present time between the finances of British and Netherlands India would give very different results to those before Mr. Money in 1861.

In the second volume, Mr. Money has treated somewhat lightly of the constitutional and judicial changes which were made in Raffles' system. The points of Raffles' organisation which were thus affected he summarises as follows :—

"The Natives of rank above that of village chiefs were deprived "of their old power. * * * * * *

"A system of criminal and civil justice was established after "the Indian form, having a European for sole judge, with a jury "of Native assessors, whose opinion, when contrary to his own, the "European could set aside.

"Equality of rights, duties and imposts was proclaimed for all, "without preference of race, creed, or family."

It is in regard to the alterations made in these matters that a good deal of doubt has been felt as to the justice of Mr. Money's preference of the Netherlands Indian to the British Indian system. He seems to find fault with Raffles' sympathy for "the energetic English idea that men of all races *must like* "independence," and he has no fault to find with the "Wedana" and "Regency" courts, in which he found justice "administered ac-"cording to Native ideas," and giving "universal satisfaction" because "modified by the Dutch and assimilated to Native ideas "and requirements." (p. 67.)

Unfortunately for those who thought Raffles' views were the sound ones, it was just in regard to these matters that exact and reliable information was most inaccessible. The story of "Max

Havelaar" suggested that there was much to be said on the other side of the question: but then that work was a fiction, published anonymously, and under circumstances in which true impartiality was hardly to be looked for. Mr. Money did not give, and does not appear to have had before him, the text of the Regulations of the Government of Netherlands India, showing the exact terms of the Constitution of Government; and, until lately, any full enquiry into the actual working of this part of the system could hardly have been prosecuted except in the Courts of Java itself.

But Dr. C. P. K. Winckel, a lawyer in Samarang, has removed all difficulties on this head by publishing a very careful and scholarly "Essai sur les Principes régissant l'Administration "de la Justice aux Indes Orientales Hollandaises" (Samarang and Amsterdam, 1880), and admirers of Mr. Money's book will not do amiss to see for themselves what is to be said on this part of the subject by an old practitioner of the very Courts in question. A few extracts is all that space here permits, but Dr. Winckel's account of the Native Codes (pp. 65 to 85), in particular, cannot fail to interest many members of our Society.

In a short Preface, our author first refers to the essential apathy of the Mother Country, notwithstanding much political discussion, which he explains as follows:—

"Affranchies du joug de parti, de généreuses natures ont senti ce "qu'avait d'avilissant pour l'exploiteur le système d'après lequel les "grands travaux publics dont s'enorgueillit la Hollande, ont été "payés par le Javanais. * * * * * *

"A quoi tient, actuellement, le peu de connaissances exactes "quant aux colonies, qu'on trouve chez nos hommes d'état?

"Le fait est qu'ils se trouvent dans une position assez désagréable. "La nation, habituée à voir défrayer par ses possessions d'outre-"mer une partie du budget national, ne peut se faire à l'idée d'y "renoncer, et recule, par conséquent, devant les grandes mesures "qu'on voudrait bien prendre pour le bonheur des colonies, mais "qui coûteraient de fortes sommes.

" Dès lors, on n'aime pas trop à approfondir l'administration des " colonies. Elle n'apprendrait que des choses humiliantes, mais " irrémédiables à moins de grands sacrifices pécuniaires. * * *

" Chaque fois qu'un journaliste hollandais vient à Java, on sent à " chaque ligne que les intérêts de la métropole sont pour lui le " principal. Si même l'ère des *excédants coloniaux* est irrévocable-" ment fermée, la Hollande, c'est pour lui un point sans conteste " doit toujours exercer sa tutelle étroite et soupçonneuse.

" La société aux Indes ne sait point ce qu'il lui faut, etc., etc.

" A peine une année s'écoule-t-elle, et déjà notre homme aban-" donne sa bannière, pour tourner ses armes contre la mère patrie. " Souvent il n'a que trop raison. Son journal devient donc pénible " à lire, et on ne le lit point, en Hollande du moins.

" Il s'ensuit que la petite classe qui pourrait le mieux ren-" seigner le public, est considérée en Hollande avec défiance."

He proceeds with a translation from the Dutch text of the present Constitution, or " Règlement sur la Conduite du Gouvernement " de l'Inde Hollandaise" (1854). This is contained in 132 Articles, and to a great extent it corresponds with the " Colonial Regulations," under which the British Crown Colonies are administered.

" La traduction du Règlement gouvernemental, que j'ai faite " aussi servilement exacte que j'ai pu, n'a pas été la partie la moins " ardue de ma tâche. Rédigé dans un style dont la plupart des " Hollandais non jurisconsultes ne comprennent point la phrasé-" ologie barbare, le texte est absolument rebelle à la version dans " un langage aussi clair et aussi précis que le français."

A few of the early Rules may be thought worth quoting, from this new French version, for their general interest :—

2. " Le Gouverneur Général doit être Hollandais et avoir ac-" compli l'âge de 30 ans.

" Il est nommé et révoqué par le Roi ; il ne lui est point permis de " se démettre de sa dignité, ni de quitter l'Inde Hollandaise, sans " autorisation du Roi.

8. " Le vice-président et les membres du Conseil de l'Inde Hol-" landaise, doivent être Hollandais et avoir trente ans révolus.

" Ils sont nommés et révoqués par le Roi.

" La parenté ou l'affinité, jus'qu'au 4ème degré inclusivement, ne " doit point exister entre le Gouverneur Général, le Lieutenant " Gouverneur Général et le vice-président ou les membres du Con- " seil, ni entre le vice-président et les membres entre eux.

" Celui qui, après sa nomination, devient allié au degré interdit, ne peut garder ses fonctions sans la permission du Roi.

" L'affinité cesse par la mort de la femme qui la causait.

45. " Le Gouverneur Général, d'accord avec le Conseil de " l'Inde Hollandaise, peut interdire le séjour de l'Inde Hollandaise á " des personnes, qui n'y sont point nées, et qui sont considérées " comme dangereuses pour la tranquillité et l'ordre publics.

47. " D'accord avec le Gouverneur Général de l'Inde, de Gouver- " neur Général peut, dans l'intérêt de la tranquillité et de l'ordre pu- " blics, indiquer à des personnes nées dans l'Inde Hollandaise cer " taine localité pour y séjourner, ou leur interdire le séjour dans " certaines localités."

Articles 67 to 75 are those which deal expressly with the Java system of ruling the Natives, and are as follows :—

67. " Pour autant que le permettent les circonstances, la popu- " lation indigène est laissée sous la conduite immédiate de ses pro- " pres chefs, nommés ou reconnus par le gouvernement, assujettis " à tel contrôle supérieur qui est ou sera établi par le Gouverneur " Général, par des préceptes généraux ou spéciaux.

68. " La division du territoire de l'Inde Hollandaise en pro- " vinces a lieu par le Roi.

" Dans les provinces, l'administration a lieu au nom du Gouver- " neur Général par des fonctionnaires supérieurs, sous des titres " hiérarchiques fixés ou à fixer.

" Le Gouverneur Général arrète les instructions de ces fonction- " naires supérieurs et règle leurs relations avec les différents col- " lèges et fonctionnaires, avec les commandants militaires et avec " les commandants des vaisseaux de guerre de l'Etat.

" Tant qu'il n'en est pas disposé autrement, l'autorité civile est " la plus élevée.

69. " Le Gouverneur Général divise les provinces en régences.

" Dans chaque régence il est nommé, avec le titre hiérarchique " que comportent les usages indigènes, un régent, choisi par le " Gourverneur Général parmi la population indigène.

" Les instructions des régents et leur position vis-à-vis des fonc- " tionnaires européens sont fixées par le Gouverneur Général.

" La charge de régent à Java venant à vaquer, il est choisi pour " successeur, autant que faire se peut, l'un des fils ou parents du " dernier régent, sauf les conditions de capacité, de zêle, d'honnêteté " et de fidélité.

70. " Là où il le juge nécessaire, le Gouverneur General divise " les régences en districts.

" Chaque district est administré par un chef indigène avec tel " titre hiérarchique que comportent les usages indigènes.

" Les instructions des chefs de districts et leurs rapports avec " les fonctionnaires européens sont fixés par le Gouverneur Géné- " ral.

71. " Sauf l'approbation de l'autorité provinciale, les communes " indigènes* élisent leurs chefs et leurs administrateurs. Le Gou- " verneur Général maintient ce droit contre toute infraction.

" A ces communes est laissé l'arrangement de leurs intérêts " locaux comme elles l'entendent, en observant les régulations " émanant du Gouverneur Général ou de l'autorité provinciale.

" Là où les dispositions des al. 1 et 2 de cet article ne concor- " dent pas avec les institutions du peuple ou avec des droits acquis, " elles ne sont point introduites.

72. " Les fonctionnaires, revêtus du pouvoir provincial suprême, " sont compétents pour faire des règlements et ordonnances de " police. Ils peuvent établir des peines contre leur contravention, " d'après des règles à fixer par Acte Legislatif Général.

73. " Les étrangers Orientaux établis dans l'Inde Hollandaise " sont réunis dans des quartiers séparés, autant que faire se peut, " sous la conduite de leurs propres chefs.

---

* Further on in the essay, at p. 148, the author points out how this privilege of election is sometimes violated by the functionaries and how much is needed some judicial control over these village elections.

" Le Gouverneur Général a soin ce que ces chefs soient pourvus " des instructions nécessaires.

74. " Partout où la population indigène n'est point laissée en " jouissance de ses propres institutions judiciaires, la justice aux " Indes Hollandaises est rendue au nom du Roi.

75. " Quant aux Européens, l'administration de la justice en " matière civile et commerciale, ainsi qu'en matière pénale, est " fondée sur des Actes Legislatifs Généraux, concordant autant que " faire se peut avec les lois existant en Hollande.

" Le Gouverneur Général, d'accord avec le Conseil de l'Inde " Hollandaise, est compétent pour déclarer applicables à la population indigène ou bien à une partie de cette population, les dispositions de ces Actes Legislatifs, à ce susceptibles, et modifiées s'il " y a lieu.

" Sauf les cas dans lesquels pareille déclaration a eu lieu, ou " dans lesquels des indigènes se sont assujettis de plein gré au " droit civil et commercial établi pour les Européens, le juge indigène applique les lois religieuses, institutions et coutumes des " indigènes, en tant qu'elles ne sont point en opposition avec des " principes d'équité et de justice généralement reconnus."

The only other articles of interest here are 115 to 118, dealing with slavery and debt-slavery :—

115. " Le 1 janvier 1860, au plus tard, l'esclavage est aboli " dans toute l'Inde Hollandaise.

" Les mesures, servant à préparer graduellement et à mettre à " exécution par degrés et peu à peu cette abolition, ainsi que les " indemnisations qui peuvent en découler, sont prises par Acte " Législatif Général.

" Dans le rapport dont il est question à l'art. 60 al. 1 Loi Fondamentale dn Royaume, il est dit tous les ans ce qui a été fait en " exécution du présent article.

116. " La traite, l'importation et la vente publique d'esclaves " sont interdites.

" Les personnes amenées d'ailleurs comme esclaves, sont libres dès " qu'elles se trouvent sur le territoire de l' Inde Hollandaise.

117. "Les droits et les obligations des maîtres vis-à-vis des esclaves se trouvant dans l'Inde Hollandaise sont réglés par Acte Legislatif Général.

118. "Dans Java et Madoura il reste défendu de prendre des gens en gage* comme sûreté pour dettes.

"Cette prohibition est appliquée par le Gouverneur Général à telles parties des possessions hors de Java et de Madoura, où l'état social le permet.

"Les Actes Legislatifs Généraux réglant la captivité pour dettes† là oú il ne peut encore être aboli, tendent à en favoriser l'abolition.

"La condition de captif pour dettes ne passe point aux enfants du débiteur.

"Il est défendu de transporter outre-mer des captifs pour dettes."

After the text of the Regulations comes the comment upon the judicial section of the *Règlement* (Articles 74 to 104). A full dissertation is given upon Article 74 in particular (quoted above), which deals with the working of the Indigenous Courts :—

"Le lecteur a dû s'apercevoir de ceci : dès le premier mot, il y a bifurcation dans l'administration de la justice aux Indes Hollandaises. D'un côté, la justice royale ; de l'autre, l'autonomie indigène. * * * * * * *

"Le gouvernement hollandais est partout plus ou moins lié á cet égard par des promesses semblables ou des traités explicites. Dans les négociations parlementaires il a avoué que cet état de choses existait aussi dans le pays de Ternate et de Tidore, dans les royaumes confedérés de Célèbes, enfin dan les îles de Bouton, de Soumbawa, de Bali et de Lombok.

"Et nous croyons qu'il ne les a pas tous nommés.

---

* "*Pandelingen.*"

† "*Pandelingschap.*" "Cette forme malaise de l'esclavage pour dettes, avec obligation de travail dans la maison du créancier, n'existe plus maintenant qu'en quelques provinces. Par ordonnance de 1872 (Bulletin des Lois 114), il a été défendu de prendre de nouveaux prisonnier pour dettes. L'institution s'éteindra donc, *dans les pays administrés directement par le pouvoir hollandais* (Bulletin des Lois 1859, no, 43, IV. b) avec la mort ou la libération des malheureux qui en 1872 subissaient encore ce triste sort."

"Heureusement, il s'est établi de longue date une ingérence "réformatrice; surtout là où l'on n'a point affaire à des princes, "mais seulement à des populations. Avec de l'adresse et beaucoup "de ménagements, il a déjà été fait beaucoup.

"Car, ne le dissimulons pas, il n'y a rien de plus détestable que "cette autonomie judiciaire indigène.

"Un peuple conquérant fait œuvre immorale s'il n'assume le "premier devoir d'un gouvernement, l'administration de la justice. "Les peuples asservis n'ont plus les qualités requises pour être "des juges intègres. Rester dans la légalité est impossible à un "homme de cœur, et le fonctionnaire qui renvoie aux institutions "autonomes indigènes tel ou tel accusé fait absolument la même "chose que Pilate. Bien souvent on a suivi cet exemple néfaste; "et même, parmi les personnes qui n'en ont point de notions *de* "*visu* et qui cependant décident des lois à Batavia et en Hollande, "il y en a qui osent prétendre que toute ingérence est fâcheuse.

"Heureusement, nous l'avons déjà dit, le gouvernement hollan- "dais a toujours pris les coudées assez franches à cet égard.

"Il a commencé par s'arroger partout le droit de grâce. C'est "une hérésie: étant dévolu au Gouverneur-Général par un article "[52] du Règlement sur la Conduite du Gouvernement, il ne peut "être exercé qu'ayant égard au § 2 de l'art. 27, cité ci-dessus, "qui limite l'application du Règlement tout entier. Les traités, "du moins ceux conclus avec les princes indigènes de Java, sont "muets à cet égard.

"Les rigueurs de l'autonomie indigène sont donc tempérées en "premier lieu par des grâces. Les Gouverneurs des possessions "du dehors sont invités à prêter leur concours pour faire dispa- "raître ces peines qui sont une honte pour un gouvernement "civilisé, et dont le lecteur rencontrera des échantillons dans le "cours de ce travail.

"Il est vrai que cette immixtion humanitaire a son côté fâcheux. "Elle dissimule l'atrocité du systême, &c., &c.

Then follow particulars of the hearing of several cases before Native tribunals, thus controlled, which the author brings forward

to show how the Java system works in practice, and how no influence which the Residents can exert in mitigation of the "native justice" system, adequately counteracts the inherent want of equity and reason prevailing in such Courts. He ends with the following comment :—

"Finissons-en de ces horreurs. Espérons que sous l'influence "de l'autorité hollandaise, l'autonomie judiciaire indigène cessera "partout complètement ; que le législateur comprendra enfin, que "ce qui justifie l'asservissement de l'indigène, c'est que l'Européen "remplit partout le premier devoir d'un peuple conquérant, et qu'à "la fin la vérité soit d'accord avec la fière maxime : toute justice "émane du Roi."

In discussing Article 75, Dr. **Winckel** deals with some of the Native Codes at considerable length (p. 65) and the first he refers to is the *Hadat Lembaga* of Bencoolen :—

"Dans le Regt in Neerlandsch Indië, tome I, 256, on trouve une "espèce de codification des lois et coutumes observées en Ben-"coulen, dans le Sud de Sumatra, *l'hadat lembaga.* Elle a été faite "par un magistrat anglais, H. K. **Leurs** (la Compagnie anglaise "n'y était point encore souveraine, mais administrait en faveur du "souverain indigène). Ce Code a été publié aussi en anglais sous "le titre 'A commentative digest of the laws of the natives of "that part of the coast of Sumatra, immediately dependent on the "settlement of Fort Marlborough, and practised in the court of "that Residency.'"

He concludes this portion of the Essay with a concise statement of the essential difficulty that exists in carrying out any dual system of administering justice : —

"Le lecteur comprendra maintenant combien il est difficile à un "Européen de présider, à l'européenne, comme *primus inter pares*, "un tribunal indigène. S'il exerce un pouvoir administratif, les "membres indigènes ne s'appliquent qu'à deviner ses intentions. "Ce n'est que lorsqu'ils sont présidés par un fonctionnaire spécial, "qu'ils se hasardent quelquefois à avoir une opinion. Seul, le

" prêtre donne par-ci par-là des raisons de son avis. Tous, après " avoir voté p. e. pour vingt ans de travaux forcés, ne se montrent " jamais offusqués quand on opine : Moi, il me semble que six mois " suffisent. Le choeur reprend alors : *touan pounja souka* (le " bon plaisir de monsieur)."

The whole Essay is well worth reading, especially by those concerned with the administration of justice among the Malays in the Colony, for the Codes and Procedure of Java are often compared by Dr. WINCKEL, in a very instructive way, with those of the Straits Settlements. But the latter portion of the Essay is, for the most part, technical in character, and the extracts already given will suffice to show the wide difference that exists between the judgment formed by the Calcutta and Samarang lawyers, respectively, on this part of the Java system.

The following passages must not, however, be omitted. The generous appreciation shown in them of Sir STAMFORD RAFFLES, the English Administrator in Java during 1811-14, deserves recognition :—

" Les Anglais, comme toujours dans la politique coloniale, ont " brillé par l'énergie. L'homme de génie qui était l'adversaire " déclaré de l'infâme système de la " Noble " Compagnie (hollan- " daise), STAMFORD RAFFLES, abolit la torture, introduisit le jury " —en quoi il avait tort, du reste—et pratiqua plusieurs améliora- " tions." (p. 48).

In a foot note he adds :—

" Après avoir été forcé par son gouvernement de rendre Java " aux Hollandais, il fonda Singapore, afin de faire tort par le com- " merce libre au vieux système économique hollandais, encore en " vigueur maintenant en grande partie à Java. Les résultats ont " été brillants. Ce grand homme enveloppait dans la même haine " les Hollandais et leur systême abominable."

* * * * * *

" Le maréchal DAENDELS aussi, se plaignait du peu de capacité " et de moralité des conseillers, et d'un esprit fâcheux d'opposition

"au gouvernement. La Haute Cour se mêlait de politique, refu-
"sait p. e. d'exécuter les lois sur l'exportation du numéraire, et
"servait de point d'appui aux fonctionnaires accusés de concussion.
"Un autre grand homme, **Stamford Raffles**, gouverneur de
"Java sous la domination anglaise, confirme le dire de **Daendels**,
"que l'acquittement des gens riches était chose ordinaire" (p. 244).

Much of the inconvenience and injustice inseparable from the system of "indigenous" Courts arises out of the conflict between that judicial *privilege* so dear to native feeling and the judicial *equality*, which European administrators not only hold right for themselves, but feel bound to maintain in their Eastern dominions. What Dr. **Winckel** has to say on this subject (p. 179-203) cannot be referred to at length, but deserves much consideration from any one who wishes to form a judgment upon "the Java System" as a whole.

A. M. S.

MISCELLANEOUS NOTES.

BÂTU KÔDOK.

(THE FROG ROCK.)

THE above is a rock which, at low tide, bears a remarkable likeness to a frog squatting. It is situated, with some other and larger rocks, in the old Straits of Singapore, between Changi and the eastern end of Pulau Ûbin, near the latter. The local account of its origin is that, when mosquitos were as big as fowls, frogs were large in proportion, and that the living original of the rock in question in those days ventured a swim across the Straits, but before he could reach land daylight appeared, and the adventurer was turned to stone where he was.

As to the days when mosquitos were as big as fowls, it is said there was a king of the mosquitos—a Râja Nyâmok—who used periodically to devour all the maidens of the land; at last he had eaten them nearly all up, and for some time could not find one. But after some trouble, he found an old woman at home who had the daughter he was looking for, but the daughter was not in the house when he went there, and on his asking her mother, she told him the maiden was out in the field, so he went out after her, and found her, but she was burning some rubbish, and the smoke interfered unpleasantly with his approach, so he asked her to desist from her disagreeable occupation, but she, having a shrewd idea of the object of his visit, declined; and so it was that the way of keeping off mosquitos was discovered, and thenceforward, no doubt, they declined in the scale of creation.

D. F. A. H.

PRÎGI ACHEH.

(THE ACHINESE WELL.)

THE above is a small well, about four and a half feet deep, in the rocks on the sea-shore of the south coast of Johor, not far from Pulau Nânas, which lies in the Johor Straits behind Pulau Ûbin, as seen from Changi on the N. E. coast of Singapore.

One tradition relates that the Achinese, when withdrawing from Johor after their attack on it, threw a stone into this well, declaring that they would return when it floated.

Some accounts attribute the making of the well to the Achinese themselves, and it is quite likely they did make it, for the place is near the mouth of the Johor river, and it is an historical fact that they took Johor (Johor Lâma?), after a siege of twenty-nine days, in June, 1613, capturing and slaying at the same time some Dutch who happened to be there in a ship.*

Another tradition in connection with this subject is of a patriotic but not historic order, and is to the following effect.

When the Achinese invaded the country, the pendent spear-like fruit of the countless mangroves which fringe the coast were turned by some invisible and friendly power, into spears, and hurled themselves against the enemy in such prodigious and unceasing showers, that the latter were soon convinced of the impracticability of their enterprise, and withdrew from a country so formidably protected.

D. F. A. H.

---

* KERR'S Voyages, vol. VIII., p. 452.

DUTCH OCCUPATION OF THE DINDINGS, &c.

Since the publication of the last number of the Journal, certain documents have been found among the records in Malacca, which throw further light on the history of the Dutch occupation of stations in Pulau Pangkor, or Dinding, and on the Pêrak river. The following is a brief *précis* of the principal of these :—

Letter from the Governor-General and the Board of Administration of the United East India Company, dated 1st October, 1661.

Pulau Dinding is mentioned for the first time in an order to cut there 200 pieces of a kind of red-wood to be sent to "Patria" (Holland).

Letter from the same, dated 5th August, 1670.

Order to take possession of Pulau Dinding and to build there a stronghold of wood.

Letter from the same, dated 31st October, 1670.

Order that the garrison on Pulau Dinding shall consist of 1 Sergeant, 3 Soldiers and 3 Sailors, and shall belong to the garrison of Pêrak.

Letter from the same, dated 24th June, 1693.

Order that no garrison shall be posted again at Pulau Dinding since the massacre by Panglima Coelop, but that a stone pillar is to be erected there having on one side, the arms of the United East India Company, and, on the other, those of the United Provinces.

Letter dated 8th August, 1695.

Order to re-erect the prostrate pillar and to clean it yearly and keep it in repair.

Letter dated 24th June, 1721.

Repetition of the same order.

Letter dated 20th November, 1745.—Governor-General Gustraaf Willem, Baron van Imhoff.

Order to build again a small fort at Pulau Dinding and to put there a garrison of 30 European and the same number of Native soldiers, but *no Bugis*.

Letter dated 18th October, 1748.—Governor-General GUSTRAAF WILLEM, Baron VAN IMHOFF.

Order to remove the garrison again on account of the insalubrity of the place and to send them to Pêrak.

I am able too, from the same source, to fix the date of the re-establishment of the post on the Pêrak river, which I was unable to do in the paper published in the last number (see "The Dutch in Pêrak," Journal, No. 10, p. 245). Under the date, October 22nd, 1746, it is stated that the under-factor, Mr. ARY VERBRUGGE is sent to Pêrak on a special mission to find out if the King will allow the East India Company to again erect a fort in his country and if he will enter into a contract to deliver all tin to the Company.

The mission was, no doubt, successful, for the records mention the agreement entered into with the King of Pêrak dated the 25th July, 1747, by which he undertakes to deliver all the tin produced in his country to the East India Company exclusively at the rate of 26 ducatoons (1 ducatoon * = 5*s.* 3*d.*) per *bhara* of 375 lbs., besides two Spanish dollars for duty, and grants permission to the Dutch to build a fort anywhere at the mouth of the river and to require all vessels to call there for the purpose of being examined by the garrison.

This is, of course, the engagement mentioned in the Malay manuscript as having been concluded in the reign of Sultan MOZAFAR SHAH, (see Journal, No. 10, p. 258).

The list of Dutch *Opperhooften* in Pêrak (p. 268A) taken from VALENTYN may be added to as follows:—

1661—1664 ADRIAEN LUCASSOON.
1664—1668 JOHANNES BRAKEL.
1668—(?) ADRIAEN VAN DER WALLE.

W. E. M.

Malacca, 28th August, 1883.

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* Old pillar-dollars, which are carefully preserved by some of the old inhabitants in Pêrak, are still called there *ringgit jukatân. (ducatoon).*

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63	Low, Sir Hugh, K.C.M.G.	Pêrak.
64	Low, H. Brooke.	Sarawak.
65	Mackay, The Revd. J. Aberigh	Paris.
66	Mikluho-Maclay, Baron (Honorary Member.)	
67	Man, General H.	Surbiton, London.
68	Mansfield, G.	Europe.
69	Maxwell, The Hon'ble W. E.	Singapore.
70	Maxwell, R. W.	Singapore.
71	Miller, James	Singapore.
72	Mohamed bin Mahboob.	Singapore.
73	Mohamed Said.	Singapore.
74	Muhry, O.	Singapore.
75	Noronha, H. L.	Singapore.
76	Nuy, P.	Singapore.
77	Ord, Sir Harry St. George, K C.M.G.,	London.
78	Palgrave, F. Gifford (Honorary Member.)	
79	Parsons, J. A.	Singapore.
80	Paul, W. F. B.	Sungei Ujong.
81	Pell, Bennett	
82	Perham, The Revd. J. (Honorary Member.)	Sarawak.
83	Pickering, W. A.	Singapore.
84	Pooles, F.	Singapore.
85	Read, The Hon'ble W. H.	Singapore.
86	Rickett, C. B.	
87	Rowell, Dr. T. I.	Singapore.
88	Sarawak, H. H. The Râja of, (Honorary Member.)	Sarawak.

MEMBERS for 1884,—*Continued.*

Nos.	Names.	Addresses.
89	Schaalje, M.	
90	Sergel, V.	Rhio.
91	Shelford, Thomas	Singapore.
92	Skinner, The Hon'ble A. M.	Singapore.
93	Smith, The Hon'ble C. C., C.M.G.	Singapore.
94	Sohst, T.	Singapore.
95	Sourindro Mohun Tagore, Râja, Mus. Doc.	Singapore. Calcutta.
96	Stiven, R. G.	Singapore.
97	Stringer, C.	Singapore.
98	Swettenham, F. A.	Sĕlângor.
99	Syed Abubakar bin Omar al Junied,	Singapore.
100	Syed Mohamed bin Ahmed al Sagoff,	Singapore.
101	Syers, H. C.	Kuâla Lumpur, Sĕlângor.
102	Talbot, A. P.	Singapore.
103	Tan Kim Ching	Singapore.
104	Tennison-Woods, The Revd. J. E. (Honorary Member.)	
105	Thompson, A. B.	Deli.
106	Thompson, J. T.	New Zealand.
107	Tolson, G. P.	Achin.
108	Trachsler, H.	Singapore.
109	Treacher, The Hon'ble W. H.	Kudat, North Borneo.
110	Trebing, Dr. C.	Singapore.
111	Trübner & Co.	London.
112	Vermont, J. M. B.	Penang.
113	Walker, Capt. R. S. F.	Pêrak.
114	Watson, Edwin A.	Johor.
115	Whampoa, Hoo Ah Yip	Singapore.
116	Wheatley, J. J. L.	Sandakan.

PROCEEDINGS
OF THE
GENERAL MEETING
OF THE
STRAITS BRANCH
OF THE
ROYAL ASIATIC SOCIETY,
HELD AT THE
EXCHANGE ROOMS.

THURSDAY, 24TH JANUARY, 1884.

PRESENT :

The Hon'ble C. J. IRVING, C.M.G., *in the Chair.*

The Hon'ble A. M. SKINNER, *Vice-President;* the Hon'ble W. E. MAXWELL, *Honorary Secretary;* E. KOEK, Esquire, *Honorary Treasurer;* H. L. NORONHA, Esquire, *Councillor;* and the following other Members :—

The Hon'bles W. H. READ and JAMES GRAHAM; Messrs. C. B. BUCKLEY, R. W. HULLETT, J. FRASER, W. BICKNELL, A. KNIGHT.

The minutes of the previous general meeting were read, approved of, and signed by the Chairman.

The Honorary Secretary read the Report of the Council for the year 1883 (*vide* p. xiii), and the Accounts of the Honorary Treasurer for the same year (*vide* p. xvii).

Mr. BUCKLEY moved, seconded by the Hon'ble W. H. READ, that the Report and Accounts be approved. Carried unanimously.

The names of the new members mentioned in the Report as having been elected by the Council since the last general meeting were then submitted for the approval of the meeting. These were, by a unanimous vote, formally approved.

The election of the two honorary members mentioned in the Report—the Revd. R. G. Lawes, New Guinea, and the Revd. J. E. Tenison-Woods—were also unanimously confirmed, on the motion of the Hon'ble J. Graham, seconded by the Hon'ble A. M. Skinner.

The election of President and Members of the Council, was then proceeded with.

Mr. Irving stated that he should be leaving Singapore before long for some time, and suggested, in view of that, that some other gentleman should be elected to the position of President. He suggested the name of the Hon'ble Cecil C. Smith, whose return might be expected shortly.

Mr. Buckley suggested that the matter might be left till Mr. Irving was really going away.

The Honorary Secretary said that, pending another general meeting, it would be sufficient to have the Vice-President in the chair during Mr. Irving's absence.

The Chairman thought it would be best to elect Mr. C. C. Smith now, remarking that Mr. Smith would be here very soon. For his own part, he believed there would not be, in all probability, another meeting before his departure, at which he could be present.

The election by ballot was then proceeded with, with the following result:—

President, ... The Hon'ble C. J. Irving.
Vice-President, at Singapore, The Hon'ble A. M. Skinner.
Vice-President, at Penang, D. Logan, Esquire.
Honorary Secretary,......... The Hon'ble W. E. Maxwell.
Honorary Treasurer,......... E. Koek, Esquire.

Councillors, ...
Dr. C. Trebing.
H. L. Noronha, Esquire.
R. W. Hullett, Esquire.
A. Duff, Esquire.
A. Knight, Esquire.

Some conversation ensued as to the approaching return of Dr. Bieber, who was spoken of by various members as an enthusiastic member of the Society and one who would fill the office of Vice-President with ability.

Mr. Skinner, in reply to a question, said that the maps (to which reference is made in the Report of the Council) would now be prepared.

A vote of thanks to the Chairman closed the proceedings.

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ANNUAL REPORT
OF THE
COUNCIL
OF THE
STRAITS BRANCH
OF THE
ROYAL ASIATIC SOCIETY,
FOR THE YEAR 1883.

The Council are happy in being able to report that the affairs of the Society are financially satisfactory, and that there is every reason to hope that, by its agency, good work is being done in the encouragement of research and the extension of scientific knowledge in the Far East.

The following new members have been elected by the Council since the last general meeting, and their names are now submitted for confirmation:—R. N. BLAND, Esq., C. S.; W. A. BICKNELL, Esq.; the Rev. R. G. LAWES, New Guinea, (Honorary Member); F. POOLES, Esq.; C. B. BUCKLEY, Esq.; C. V. CREAGH, Esq.; A. KNIGHT, Esq.; H. BROOKE LOW, Esq.; His Royal Highness Prince KROM MUN DEWAOWONGSE VAROPRAKAR; J. A. PARSONS, Esq.; N. CANTLEY, Esq.; C. B. RICKETT, Esq.; the Rev. J. E. TENISON-WOODS, (Honorary Member).

The following have retired:—Dr. LARGE; J. ROSS, Esq., Junr.; A. H. THOMPSON, Esq.

The deaths of two members have been announced—FRANK HATTON, Esq., and C. EMMERSON, Esq.

Regular periodical meetings for the purpose of reading and discussing papers upon subjects of interest have been found impossible for some time past, but it is hoped that they may be recommenced, should the Society at any time find a permanent home in the proposed Museum. The objects of the Society are not limited to the publication of a Journal; and it is felt that they would be advanced in many ways had members greater opportunities for meeting and for receiving and communicating suggestions as to subjects for enquiry and research.

The text book of Geography mentioned in the last Annual Report has not yet been completed. Great difficulty has been encountered in arranging for its production by a competent hand. It is now being completed under the direction of Mr. SKINNER, and it is believed that it will be made over to the Government for publication early in the year.

It has been proposed that the Council shall undertake the republication of a selection of papers relating to the Eastern Archipelago from the Journals of the Royal Asiatic Society, the Royal Geographical Society, the Asiatic Society of Bengal, the Madras Literary Society, &c., &c. Many papers scattered through the volumes of the proceedings of these and other Societies are of great local interest. MARSDEN, RAFFLES, LEYDEN, CRAWFURD and LOW contributed to "Asiatic Researches;" NEWBOLD's papers on the Malay States, and CANTOR's Catalogues of Malayan Animals, Reptiles and Fishes, are to be found in the Journal of the Asiatic Society of Bengal; a journey of LOGAN's through part of the Peninsula is printed in the Journal of the Royal Geographical Society. These and many other papers, if collected and republished, will, it is believed, be eagerly read by residents in the Straits of Malacca, who would never have the opportunity of consulting the files of the Journals in which they originally appeared. The permission of the Asiatic Society of Bengal has been asked for the republication of papers contained in their Journal; and Messrs. TRÜBNER and Co. will undertake the production of two volumes, to begin with, if the Society will take two hundred copies.

With the object of extending our knowledge of the Geography of the Peninsula, arrangements have been made for the preparation, for the use of the Society, of a skeleton map of the Peninsula on a scale of a quarter of an inch to a mile, upon which all new information will be entered, from time to time, as exploration advances.

A Catalogue of the Books belonging to the Society has been prepared and is attached to this Report. Steps will be taken to have volumes of the foreign Journals suitably bound.

The news of the death in Borneo, from a gun-accident, of Mr. Frank Hatton, a member of this Society, was received here in March last, and the following Minute was entered upon the Minutes of the Council of the Society held on the 11th June, 1883:—

"The President and Council of the Straits Branch of the Royal Asiatic Society desire to record the great regret with which they have heard of the premature death of Mr. Frank Hatton, F.C.S., who had evinced great interest in the objects of the Society, and whose ability and industry had led them to hope for much valuable scientific work from him in connection with Borneo."

The ordinary members of the Society have had too frequently but little time to give to literary pursuits and scientific studies. Still, nevertheless, the Council appeal to those whose personal tastes may lead them to take up any of the numerous branches of investigation within the reach of any one living in these regions; and to those whose residence in the Malay Peninsula, Borneo, Siam, &c., may enable them to note and record features of native life, folklore, superstition, &c., or to gather vocabularies of the languages of little known tribes,—to do their share in adding to the store of knowledge bequeathed to us by earlier students.

The Journal of the Indian Archipelago, conducted by J. R. Logan, from 1847 to 1859, numbered amongst its contributors, Bishop Bigandet of Rangoon, Bishop Le Fevre of Cochin China, and the Abbé Favre (author of excellent dictionaries of the Javanese and Malay languages). The body of devoted men whom the *Mission Étrangères* of Paris maintain in Indo-China have exceptional opportunities for Oriental studies, and no doubt number among them scholars of ability. Will not some of them, and missionaries of other denominations, aid in the objects of this Society? Naval Officers of our own and foreign Navies on the China Station sometimes visit localities which have been seldom or never described, or observe meteorological phenomena which it would be useful to record. Papers on such subjects would be welcomed. Members living in the Native States in the Peninsula, have still facilities for collecting and recording particulars of customs, ceremonies, superstitions and observances which belonged to the purely Malay political organisation, and which, already rapidly disappearing, will die out altogether, as district after district is opened up, and foreign ideas assert their ascendancy. The opportunity for doing this in Pêrak and Kĕdah should be seized before it is too late.

The following papers have been published in the Journal of the Society since the last general meeting:—

"Journal of a Trip from Sarawak to Meri;" by N. Denison.
"The Mĕntra Traditions;" by D. F. A. Hervey.
"Probable Origin of the Hill Tribes of Formosa;" by J. Dodd.
"Sea Dyak Religion;" by the Rev. J. Perham.
"The Dutch in Pêrak;" by W. E. Maxwell.
"Outline History of the British Connection with Malaya;" by A. M. Skinner.
"Malayan Ornithology;" by Capt. H. R. Kelham.
"Malay Proverbs;" by W. E. Maxwell.
"The Pigmies;" translated by J. Errington de la Croix.
"On the Patani;" by W. Cameron.
"Latah;" by H. A. O'Brien.
"The Java System;" by A. M. Skinner.

The Honorary Treasurer's accounts, which are annexed, show a credit balance of $1,528.95; but this includes a sum of $400 to be expended for Government in the production of the work on Geography above alluded to. There is little reason to believe that any considerable portion of the subscriptions reported as outstanding will not be recovered.

W. E. MAXWELL,
Honorary Secretary.

STRAITS BRANCH OF THE ROYAL ASIATIC SOCIETY.

Treasurer's Cash Account for the year 1883.

		$	c.			$	c.
1883.	Balance on 31st December, 1882,	$939	07	1883.	Paid for publication of Journal No. 10, ...	97	50
	Subscriptions for 1882, ...	18	00		Paid for publication of Journal No. 11, ...	114	00
	Subscriptions for 1883, ...	375	00		Paid W. F. Garland & Co. for a tracing of Pahang River,	20	00
	Sale of Journals,... ...	12	00		Paid Singapore and Straits Printing Office for printing circulars, ...	5	00
	Sale of Maps of the Malay Peninsula, ...	9	24		Paid ditto for lithographing Plans of Galena and Tin Mines and the Gulf of Siam, ...	10	70
	Sale of "Hikayat Abdullah,"	30	00		Paid William Cameron for copy of map of Ulu Pahang,	100	00
	From Mercantile Bank being Interest on $600 from 21st Jan., 1882 to 21st January, 1883, at 5 per cent., ...	30	00		Paid A. Coveney for a tracing of a map of Sĕlângor, ...	5	00
	From Colonial Treasurer, for costs on account of publication of a work on the Geography of the Malay Peninsula and neighbourhood,	500	00		Paid J. J. Manuel to account preparation of Geography of the Indian Archipelago, ...	100	00
	From Chartered Bank, being interest on $200 for three months at 3 per cent., ...	1	50		Paid Salary to Clerk, ...	120	00
	Carried forward, ...	1,914	81		*Carried forward*,	572	20

Treasurer's Cash Account for the year 1883,—*Continued.*

		$	c.			$	c.
1883.	*Brought forward...*	1,914	81	1883.	*Brought forward,*	572	20
	From Chartered Bank, being the amount deposited on 17th February, 1882, ...	200	00		Paid Special Brothers for Paper,	69	10
	From Mercantile Bank, being interest on $200 for one year,	10	00		Paid for Postage,... ...	19	76
					Paid Cooly-hire, ...	7	30
					Paid for Freight, ...	6	29
					Paid for Miscellaneous Expenses,	70	23
						744	88
					Paid Mr. E. Koek as per cash book, ...	23	07
					Balance, ...	1,356	86
		2,124	81			2,124	81

Singapore,
4th January, 1884.

EDWIN KOEK,
Honorary Treasurer.

ASSETS AND LIABILITIES.

			$ c.			$ c.
1883. Dec. 31	Subscriptions 1882 outstanding,		23 33	1883. January 4	Clerk's Salary, &c. for December, ...	11 24
	Do. 1883 do.,		160 00			
	The Balance of $1,356.86 is made up of:—					
	Amount deposited with the Chartered Mercantile Bank, ...	$600 00				
	Do. Do. due 6th March, 1884, at 5 per cent., ...	105 00				
	Amount deposited with the Chartered Bank of I. A. and China,	500 00				
	In Bank, ...	136 86				
	Cash in hand, ...	15 00				
			1,356 86		Balance, ...	1,528 95
			1,540 19			1,540 19

SINGAPORE,
4th January, 1884.

EDWIN KOEK,
Honorary Treasurer.

CATALOGUE

OF

BOOKS, &c., IN THE LIBRARY

OF THE

STRAITS BRANCH

OF THE

ROYAL ASIATIC SOCIETY.

(JANUARY, 1884.)

ABDULLAH—Hikayat Abdullah.

Annales de l'Extreme Orient. Nos. 55 and 58 to 65 of 1883. (Nos. 56 and 57 missing.)

Asiatic Society of Japan—Rules of the.

Attempt to solve the Problem of the first Landing Place of Columbus in the New World. Methods and Results. Washington, 1882.

BASTIAN, DR. A.—Beiträge zur Ethnologie und darauf begründete studien. Berlin, 1871.

Die Culturländer des alten America—I Bd. ein Jahr auf Reisen. II Bd. Beiträge zu Geschichtlichen Vorarbeiten. Berlin, 1878.

Geographische und Ethnologische Bilder. Jena, 1873.

Remarks on the Indo-Chinese Alphabets. (Royal Asiatic Society, June, 1867).

Bataviaasch Alphabetische Lijst van Land, Zee, Rivier, Wind-Storm en Anderekaarten toebehoorende. Batavia, 1873.

Bataviaasch Catalogus der Ethnologische Afdeeling van het Museum. Batavia, 1877.

Bataviaasch Catalogus der Numismatische Afdeeling van het Museum. Batavia, 1877. (2 copies.)

Bataviaasch Chineesch-Hollandsch Woordenboek van het Emoi Dialekt door J. J. C. FRANCKEN en C. F. M. DE GRIJS. Batavia, 1882.

Bataviaasch Eerste vervolg Catalogus der Bibliotheek en Catalogus der Maleische, Javaansche en Kawi Handschriften. Batavia, 1872.

Bataviaasch Genootschap van Kunsten en Wetenschappen—Catalogus der Bibliotheek door Mr. J. A. VAN DER CHIJS, Bibliothecaris. Batavia, 1864.

Bataviaasch Register op de Notulen der Vergaderingen over de Jaren 1867 t/m 1878. Batavia, 1879.

Bataviaasch Tweede Vervolg Catalogus der Bibliotheek. Batavia, 1877.

Bataviaasch Verslag van eene verzameling Maleische, Arabische, Javaansche en andere Handschriften door de Regeering van Nederlandsch Indie door Mr. L. W. C. VAN DEN BERG. Batavia, 1877.

Berliner Gesellschaft für Anthropologie, Ethnologie und Urgeschichte. Sitzung, 1876. (2 copies.)

BESONDERER ABDRUCK aus den Berichten der Naturforschenden Gesellschaft zu Leipzig. Jahrgang, 1880.

Bibliotheque de feu M. JULES THONNELIER. (Partie Orientale et Linguistique). Paris, 1880.

Bidrag till Kännedom af Finlands Natur och Folk, utgifna af Finska Vetensckaps-Societeten Trettiondesjette Häftet. (2 copies.)

Bijdragen tot de taal-Land en Volkenkunden van Nederlandsch-Indie. 1875 to 1879, 1881 and 1882.

BLUMENTRITT, FERDINAND.—Vocabular einzelner Ausdrücke und Redensarten, welche dem Spanischen der Philippinischen Inseln eigenthümlich sind. Separatabdruck aus dem XVI Jahresberichte der Communal-ober Realschule in Leitmeritz, 1882.

BOCK, CARL.—Reis in Oost en Zuid-Borneo van Koetei naar Banjermassin, ondernomen op last der indische regeering in 1879 en 1880 (with plates). MARTINUS NIJHOFFS', Gravenhage, 1881.

Bollettino de la Società Africana d'Italia. 1883, Fasc. III and VI.

Bollettino della Societá Geografica Italiana. Vols. IV to VIII. (Fasc. 5 and 6 of Vol. VII and 3 of Vol. VIII missing.)

BOWERBANK, J. S., F. R. S., F. Z. S.—Description of Five new Species of Sponges discovered by A. B. MEYER on the Philippine Islands and New Guinea. London, 1877.

Bulletin de la Société des Etudes Indo-Chinoises de Saigon. January-March, 1883.

Bulletin de la Société de Géographie Commerciale de Paris. 1879 to 1884. (Missing numbers:—2 and 3 of 1879, 3 of 1879-80, 3 of 1881-82 and 3 of 1883-84.)

Bulletin de la Société de Géographie de Marseilles. 1879 to Sept., 1883. (Nos. 6 and 7 of 1879 and 1 to 3 of 1883 missing.)

Bulletin de la Société de Géographie de Paris. 1879 to 1882 and for first three quarters of 1883. (Missing numbers:—Jan. and Nov., 1879; Jan. and Feb., 1880.)

Catalogue de Livres de Fonds et en Nombre. Paris, 1879.

Catalogue de Livres sur les Possessions Neerlandaises aux Inde savec des Divisions sur les Indes Anglaises, la Chine et la Japon, Siam, la Perse, Siberie, l'Afrique, specialement la Cote de Guinée et le Cap de Bonne Esperance, Surinam, Guyana et l'Australie, à la fin un Atlas de Cartes de Planches Historiques et Topographiques et de Portraits. Amsterdam, 1882.

Catalogue of the Library of the North-China Branch of the Royal Asiatic Society. Shanghai, 1872.

Codicum Arabicorum in Bibliotheca Societatis Artium et Scientiarum, quae Bataviæ floret asservatorum. Catalogum inchoatum a Doct. R. Friederich absolvit indicibusque instruxit. L. W. C. van den Berg. Batavia, 1873.

Collins, James.—Report on Caoutchouc. London, 1872.

Cosmos. Vol. VII. Nos. I to IX.

Croizier, Marquis de.—Les Explorateurs du Cambodge. (Extrait des Annales de l'Extreme Orient.) Paris, 1878. (2 copies.)

Crüwell, G. A.—Liberian Coffee, its History and its Cultivation. Colombo, 1878.

Dennys, N. B.—The Folklore of China, and its Affinities with that of the Aryan and Semitic Races. London, 1876.

Deutsche Geographische Blatter Herausgegeben von der Geographischen Gesellschaft in Bremen. Vols. III to VI.

Doyle, Patrick.—A Contribution to Burman Mineralogy. Calcutta, 1879.

Petroleum: its History, Origin, and Use, with reference to its Advantages and Perils as an Illuminator. Brisbane, 1880.

Tin Mining in Lârut. London, 1879.

Dritter Jahresbericht des Vorstandes der Geographischen Gesellschaft in Bremen.

Eastern Asia, The Journal of—Edited by James Collins, f. b. s. e., Vol. I, No. 1. Singapore, 1875.

Enquiry into the Variation of the Compass off the Bahama Islands at the time of the Landfall of Columbus in 1492. Methods and Results. Washington, 1882.

Favre, L'Abbé, P.—Grammaire Javanoise accompagnée de Fac-Simile et d'Exercises de Lecture. Paris, 1866.

Fragmenta Phytographiæ Australiæ. (2 copies).

Frenzel, A.—Mineralogisches aus dem Ostindischen Archipel.

Friederici, Charles.—Bibliotheca Orientalis or a Complete List of Books, Papers, Serials and Essays published in 1876 in England and the Colonies, Germany and France on the History, Languages, Religions, Antiquities, Literature and Geography of the East.

Fünfter Jahresbericht des Vorstandes der Geographischen Gesellschaft in Bremen. Bremen, 1882.

FURRELL, JAS. W.—The Tagore Family. A memoir. 1882.

Gazzetta Italiana Illustrata alla Memoria di Alessandro Manzoni. No. XXII, May, 1883.

GIBERT, EUGÈNE.—Le Mouvement Économique en Portugal et le VICOMTE DE SAN JANUARIO. Paris, 1881.

HAAS, JOSEPH.—Siamese Coinage. Shanghai, 1880.

HILL, T. H.—Report on Johore.

HOLLE, K. F.—Kawi-oorkonden, Facsimile met Transscriptie van een Inscriptie op koperen Platen van 782 en 1295 van çaka (A. D. 856 en 1369). Batavia, 1879.

Tabel van oud-en-nieuw-indische Alphabetten-Bijdrage tot de Palaeographie van Nederlandsch-Indie. Batavia, 1882. (2 copies.)

JACKSON, JAMES.—Liste Provisoire de Bibliographies Géographiques Speciales. Paris, 1881.

J. K.—Dictionary of the Sea Dyak Language. Kuching, Sarawak.

Journal des Savants—for June and August, 1882.

Journal of the Ceylon Branch of the Royal Asiatic Society 1880, Part II.

Journal of the North-China Branch of the Royal Asiatic Society. Vols. I and II 1859 and 1860; New Series Nos. I to IV and VI to XVII.

Journal of the Straits Branch of the Royal Asiatic Society. Nos. 1 to 11.

Katalog Ethnologischer Gegenstände aus dem Tschuktschenlande und dem südöstlichen Alaska. Bremen, 1882.

KIRSCH, TH.—Beitrag zur Kenntnis der Coleopteren-Fauna von Neu Guinea. Separat-Abdrug aus den Mittheilungen des Kgl. Zoolog. Museums zu Dresden, Heft II.

KOEHLER'S, K. F.—Antiquarium in Leipzig. Catalog No. 366. Leipzig, 1882.

Koloniale Kroniek, Koloniale Literatuur (overgedrukt uit de Economist, 1881).

Langue Annamite, Notions pour servir à l'Étude de la. Saigon, 1878.

LEEMANS, Dr. C.—Bôrô-Boudour dans l'Ile de Java, publié d'apres les ordres de son Excellence le Ministre des Colonies. Leiden, 1874. Same work in Dutch. Leiden, 1873.

LEGRAND, LE Dr.—La Nouvelle Société Indo-Chinoise fondée par M. LE MARQUIS DE CROIZIER et son Ouvrage l'Art Khmer. Paris, 1878.

Lettres et Pièces Diplomatiques écrites en Malay, recueillies et publiées pour servir d'Exercices de Lecture et de Traduction aux éleves de l'École Royale et Spéciale des Langues Orientales Vivantes, Paris, 1845.

LIVERSIDGE, ARCHIBALD, F. R. S.—Journal and Proceedings of the Royal Society of New South Wales, 1881, Vol. XV. Sydney, 1882.

The Minerals of New South Wales.

Maritime Code of the Malays. Singapore, 1877. (2 copies.)

MARRE, ARISTIDE.—Makôta Radja-Râdja ou la Couronne des Rois par Bokhâri de D'johore, traduit du Malais et annoté. Paris, 1878.

MAXWELL, W. E.—Two Malay Myths: the Princess of the Foam and the Raja of the Bamboo.

MEYER, Dr. A. B.—Alphabetischer Index zu den in diesem Jahrgange (Band LXIX, Seite 74, 202, 386, 493 und Band LXX, S. 110 u. 200 u. fg. abgedruckten sechs Mittheilungen. Über neue und ungenügend bekannte Vögel von Neu-Guinea und den Inseln der Geelvinksbai.

Bericht ueber eine reise nach Neu-Guinea unternommen in den Jahren 1872 und 1873, vortrag, gehalten am 25 Novembre, 1873, in der K. K. Geographischen gesellschaft zu Wien.

Die Kalangs auf Java. Separat-Abdruck aus der "Leopoldina" amtliches Organ der Kaiserlich Leopoldinisch-Carolinisch-Deutschen Akademie der Naturforscher. Heft XIII, Nr. 13-14. August, 1877.

Die Philippinischen Inseln betreffende Schriften.

Neu-Guinea. Reiseskizze Separat-Abdruck aus dem "Ausland," Nos. 49 & 50. December, 1873.

Notizen über das Feilen der Zähne bei den Völkern des ostindischen Archipels.

Probe der Mafoor'schen sprache. Wien, 1874.

Über die Namen Papúa, Dajak und Alfuren. Wien, 1882.

Über Hundert fünf und Dreissig Papúa Schädel von Neu-Guinea und der Insel Mysore (Geelvinksbai). (Fortsetzung.) Separat-Abdruck aus den Mittheilungen des Kgl. Zoölog. Museums zu Dresden. Heft III, 1878.

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ORNITHOLOGICAL NOTES

MADE IN THE

STRAITS SETTLEMENTS

AND IN THE

WESTERN STATES OF THE MALAY PENINSULA.

(First published in "The Ibis.")

(Continued from Journal No. 11, p. 29, and concluded.)

* * *

GALLUS FERRUGINEUS (Gm.). The Jungle-fowl.

The common Jungle-fowl, the "Ayam-utan" of the Malays, is exceedingly plentiful throughout the Native States; but I never met with it on the island of Singapore, and it is not common, if, indeed, found at all, on Pulau Penang.

Whether or not the Malay species, Temminck's *G. bankiva*, is really distinct from the Indian, it is hard to say; but if it is distinct, both kinds are certainly found in the Malay countries; for, while stationed in Pêrak, I shot, out of the same tract of jungle, unmistakable specimens of *G. ferrugineus*, with the rich golden hackles and white ear-patches, also birds of far darker, in one case almost black, plumage. But the wild Jungle-fowl interbreed so much with domestic roosters from the villages, that I cannot help thinking these dark-coloured birds to be the results of such intercourse, particularly as many of them, though very unlike the typical *G. ferrugineus*, are not like one another, varying much in the intensity of their colouring.

In Pêrak I found Jungle-fowl breeding from March to July; and the young, when three or four weeks old, were capital eating—far better than the full-grown bird, which has but little more game flavour than the ordinary domestic fowl.

At the first glimmer of daylight, and again towards evening, the Jungle-cocks may be heard in all directions, crowing loudly, and by very careful stalking may occasionally be got at; but I found far the most successful plan was, either early in the morning, or else about sunset, to sneak quietly along the edges of clearings and patches of cultivation, which at those times the Jungle-fowl frequent in search of food; and in this way; by dodging from bush to bush, I frequently rendered a good account of them. But it required the most careful stalking, as on the slightest alarm the birds ran into the thick jungle, where it was almost useless to follow them. Once or twice I shot them in thick cover by letting my dog hunt them up into the trees, which they did not leave till I was within range.

In Province Wellesley the Malays decoy Jungle-fowl by imitating the crowing and flapping of the wings of the cock, when the birds coming to accept the supposed challenge are shot.

The following are descriptions of birds I shot near Kuâla Kangsa, Pêrak:—The cock, though in magnificent plumage, wanted the white ear-coverts; he was about 22 inches in length, tarsus 3 inches; irides orange; head and neck covered with long golden hackles, darkest on the head and nape; the back and long upper tail-coverts rich chestnut, the latter of a golden hue; primary and secondary wing-coverts black, glossed with metallic shades of purple and green; lesser coverts rich maroon; wing-quills dusky, with rufous margins to the outer webs; tail black, glossed with green; underparts dull black, with some of the feathers edged with brown.

The hen is of much plainer plumage. Upper parts brown, minutely freckled with a paler and more rufous shade of the same colour, with some of the feathers pale-shafted; the hackles are black, short, and edged with yellow; underparts pale rufous-brown; the feathers of the breast pale-shafted; length of bird about 15 inches.

Gallus varius (Shaw.).

In the Botanical Gardens at Singapore there was a specimen of this handsome Jungle-fowl; but probably it had been imported.

Excalfactoria chinensis (Linn.). The Blue-breasted Quail.

This tiny but most beautifully marked Quail swarms throughout the Malay States, being found in almost every dry paddy-field or tract of scrub and grass-covered ground. It is difficult to flush, not rising until almost trodden on; then, after skimming over the grass with a Partridge-like flight for fifty or sixty yards, it drops like a stone, and is hard to put up again, even with a dog.

The sudden way in which they drop to the ground frequently deceives the inexperienced sportsman, who, thinking he has made a successful shot, hurries to where the bird apparently fell, and makes a long and fruitless search, while the object of his pursuit is running as hard as it can lay legs to the ground to a distant part of the field.

They are very good eating, but so small as to be scarcely worth a charge of shot; and after being a few weeks in the country, and ceasing to look on them as a novelty, one seldom fires at them, confining one's attention to larger game, in the shape of Snipe, Plover, &c.

The sexes are very unlike in plumage, the male being by far the more handsome and brightly-coloured bird. One, shot near Saiyong, Pêrak, on 24th April, was 5¼ inches long; irides deep crimson; legs bright orange; beak black; head and upper parts brown; feathers of the back pale-shafted, and banded, mostly on one web only, with black; wings pale brown, some of the coverts edged with rufous and bluish grey; forehead, cheeks, sides of neck, and breast bright bluish grey; moustache-streak and broad crescentic mark on throat pure white, bordered by a deep black line; chin and throat black; abdomen ruddy chestnut. The female is not nearly so boldly marked: one, shot at Singapore on 7th November, measured 5¼ inches in length, tarsus ¾ inch; legs orange; irides red-brown; supercilium, throat, and forehead rufous brown; chin dull white; breast dingy brown, with narrow black cross bars; feathers of flanks much lengthened; the white and black markings of the throat, also the chestnut abdomen of the male, were wanting.

Rollulus rouroul (Scop.). The Crested Partridge.

Though not rare, this bird is seldom seen, being very shy, and on the approach of danger trusting to its legs rather than taking flight. All my specimens were snared in the neighbourhood of Kuâla Kangsa.

Captain Wardlaw-Ramsay tells me he found it plentiful round Mount Ophir; and I saw several skins in Malaccan collections. These birds thrive well in confinement, but are not easily tamed: some which were in my aviary for several months were always wild, hiding directly any one appeared in sight; but early in the morning, when all was quiet, and they thought they were not observed, they used to come out of their hiding-places and feed on rice and Indian corn.

The male is very handsome, with a crest of red plumes on its head; the female is without the crest, and of much duller colours than her mate.

Rhizothera longirostris, (Temm.).

While stationed at Kuâla Kangsa, Pêrak, a Malay brought me one of these curious Pheasant-like birds, which he had snared, and I put it in my aviary; but it only lived a few weeks.

I also saw a couple in confinement, at Singapore, in Mr. Whampoa's garden; but he could not tell me anything about them, not even where they came from. They were about the size of a domestic hen, wings and tail short, legs whitish, tarsus spurred; irides dark brown; beak black, sharp, and very much curved; plumage rich brown, mottled and spotted with a darker shade of the same colour; at the base of the neck and on each side of it was a greyish-blue patch; feet and claws very large and powerful.

To a casual observer these birds look like the hens of some species of Pheasant. They are known among the Malays by the name of "Burong salantung."

Turnix plumbipes (Temm.). The Black-breasted Bustard-Quail.

For some time I put down this Bustard-Quail as Sykes's *T. taigoor*; but apparently it is distinct from that species.

It is very plentiful throughout Western Malayana; but I rarely found more than two or three together; in fact, I generally flushed them singly, and, as a rule, on ground covered with scrub or long grass. Like all the Quails, they are very difficult to put up, trusting to their legs more than their wings.

In my note-book I have written as follows:—

" Kuâla Kangsa, Pêrak, 8th June, 1877.—To-day I shot a female specimen of the Malayan *Turnix*, almost identical with *T. taigoor* of SYKES: my bird measures 6¼ inches; irides yellowish white; bill and legs bluish lead-colour; it has but three toes; throat and upper part of breast black; under-parts and the wings rufous brown, barred on the wings and lower part of the breast with black; head and neck freckled with black and white spots: claws white; weight slightly over 2 oz.

" When walking through the jungle I often flush these Quail. Small open patches appear to be their favourite resorts; and I very seldom find them in the paddy-fields, where the little *Excalfactoria chinensis* swarms."

Among the "lalang" grass round the barracks at Singapore, Bustard-Quail were very common, breeding during May, June and July.

On 1st July I found a brood of five young ones running about with their mother among the flower-beds in the Botanical Gardens, and on 24th August disturbed a family of them in the long grass close outside our mess; they could not fly more than a few yards at a time, so were easily caught.

One I carefully examined, though fully feathered, could scarcely fly at all, but ran at a great pace, and showed much cleverness in hiding itself by crouching flat on the ground, taking advantage of any hole or depression; its irides were straw-colour, like those of the adult.

I used to see the Malays in Pêrak employ these birds as decoys to catch others of their kind, much in the same way as Dr. JERDON in his "Birds of India" describes it as being done by the natives in the south of India.

The decoy, usually a hen bird, is enclosed in a small wicker cage, having an arrangement by which, on the breaking of a thread which is stretched across the bars, a net springs over the front of the cage. This contrivance is placed in a likely spot in the jungle: and the wild Quails, attracted by the "calling" of the decoy, try to get at it, and, fluttering against the outside of the bars, break the thread, set free the spring-net, and are caught.

Dr. JERDON says that in India all the birds thus caught are hens, as are the decoys: unfortunately I neglected to see if such was the case in Pêrak; but if so; it conclusively proves that it is not sexual desire, but their pugnacity, that is so fatal to them. The female is the larger and by far the more handsome bird of the two, the male wanting the deep-black throat and upper breast, and being altogether less boldly marked.

GLAREOLA ORIENTALIS (Blyth.).

The Swallow-Plover is very common during the seasons of migration, arriving at the same time as the Golden Plover, *Charadrius fulvus*; but I never met with it at other times of the year. During March, and again in September and October, great numbers pass over the island of Singapore; but they are then so tame that it is poor sport shooting them: often they squatted so closely that I walked within a few yards before they would rise; then they frequently settled again after flying a short distance. Perhaps this extraordinary tameness was owing to the fatigue occasioned by migrating. I noticed that they were generally found in large flocks on cultivated ground, and were particularly fond of ploughed land, more especially if it was on a hillside.

The vernal migration takes place early in the year; in my notebook is the following passage:—

"Kuâla Kangsa, Pêrak, 22nd February, 1877.—This afternoon I paddled down the Pêrak river in a canoe to Kampong Saiyong, accompanied by H——, on our way getting a Golden Plover out of a pair which were sitting on a sand-bank in the middle of the river.

"A little further on, on another sand-bank, we saw an enormous flock of birds, which every now and then rose with shrill cries, and after flying a few yards settled again, squatting flat on the sand. Not knowing what they were, we stalked them, and bagged six, losing three more, which fell into the river and were swept away.

"At first I took them to be the European Pratincole, but now see, as stated by JERDON, that they differ from that species in having the tail less forked; they must be migrating, as on no former occasion have I seen any here; and their being in such numbers, and so easily approached, makes it still more probable that they are on passage. When fired at the big flock broke up into small parties of from ten to twenty; but after a short time they all returned to the sand-banks. While on the wing, flying close over the surface of the water, the most noticeable points about them were their Swallow-like wings and white rumps."

In plumage the sexes are alike; but immature birds which I shot in Singapore during September were not nearly so decidedly marked as the adults, moreover they were much mottled and freckled with brown. The pectinated middle claw, large eye, wide gape, their flight, and the way they crouch flat on the ground, all seem to point to a relationship between these birds and the Caprimulgidæ.

SQUATAROLA HELVETICA (Gm.). The Grey Plover.

Identical with the European species. The Grey Plover is common among the islands and along the coasts of the peninsula from October to March, but appears to breed further north. On 13th April, 1879, I had over a dozen brought to me, which had just been caught on the coast a few miles south of Malacca; and of these one showed considerable signs of the breeding-plumage, its breast being much blotched with black. During October, November and December, some may always be shot on the shores of Pulau Ubin, Pulau Nongsa, and the other rock-girt islands near Singapore; a female which I shot off Pulau Ubin was sitting on an isolated rock in company with a large flock of Ringed Plover (*Ægialitis geoffroyi*).

CHARADRIUS FULVUS (Gm.).

The Eastern Golden Plover is very plentiful during the north-east monsoon, but goes north in April to breed, returning again to the south of the peninsula towards the end of September. In Pêrak, during January and February, I found them in large flocks on the edges of all the jheels, particularly those in the neighbourhood of Kôta Lâma, Saiyong, and Sengan; but they got scarcer in March. The 8th April was the latest date on which I shot one, which, in company with another, was sitting on a sand-bank in the middle of the Pêrak river; it had almost fully assumed the black breast of the breeding-season. In 1879, while stationed at Singapore, as late as 13th April, a Malay fisherman brought me a large cage full of Terns and shore-birds, which he had netted on the sands near the mouth of the Moar river; and among them were several Golden Plovers, all in various stages of the breeding-plumage; so probably they nest somewhere towards the north of the peninsula, though in Singapore and the south they are most certainly migratory.

In Singapore, though no very large bags were to be made, they often, during October, afforded me a capital afternoon's sport. In the neighbourhood of Tanglin the best places for them were the Chinamen's gardens and the cultivated hills near Cluny; but there was also good ground near Changi, at Gaylang, and on the Trafalgar estate.

When shot at some distance inland they are very good eating; but a coast diet spoils them for the table: some I shot on the sea-shore at Pĕnâga, in Province Wellesley, were quite uneatable, having a strong, fishy, decayed-seaweed kind of flavour.

In my notes are many references to this species, among them the following:—

"Tanglin, Singapore, 2nd October.—Early this morning three Golden Plovers were running about our lawn-tennis ground, close to the public road; they were very tame, allowing me within a few yards before they rose, and even then flying but a short distance. In the evening, at dusk, while several of us were playing tennis, laughing and talking, a Golden Plover circled round two or three times, then settled on the ground in our midst. I never saw one so tame, but believe it was migrating, and so tired as to be regardless of danger and glad to rest anywhere."

ÆGIALITIS GEOFFROYI (Wagl.). The Sand-Plover.

Found in great numbers on the coasts of the peninsula during the north-east monsoon. Towards the end of November, 1879, I found enormous flocks of them at low tide on the shore of Pulau Batam; they were then all in the brown-and-white winter plumage. One, which I shot out of a flock of Charadriinæ which rose from a rock in mid channel between Pulau Ubin and Singapore, was $8\frac{3}{4}$ inches in length; irides dark brown; beak at front $\frac{10}{12}$ inch; legs black; tarsus $1\frac{5}{6}$ inch; upper parts and streak below the eye dull brown; forehead, tip of tail, and the underparts white; date 10th January.

The summer plumage is very different from that of the winter time. In my note-book I find the following notes concerning two specimens obtained alive from the Malaccan coast on 13th April, 1879:—

"The two Sand-Plovers which were brought to me to-day differ much in appearance; both are *Æ. geoffroyi*. My identification has been confirmed by Mr. DAVISON; so there can be no mistake; but they are certainly very unlike one another, one being in the ordinary brown-and-white winter plumage, the other, a female, in the rufous colours of the breeding-season. This last, Mr. DAVISON tells me, is the only specimen in summer plumage that he has ever seen in these parts. The following is an accurate description of it:—

"Length 8½ inches, bill at front 1, tarsus 1½; bill black; irides dark brown; forehead, lores, ear-coverts, and streak below eyes black; spot on each side of forehead, the chin, throat, abdomen, margins of inner webs of the primaries, white; upper parts hair-brown, tinged with rufous, particularly on the head and neck; a broad band round the upper part of the breast bright rufous."

ÆGIALITIS MONGOLICA (Pall.).

Frequents the coasts during the north-east monsoon. On 23rd November I shot one out of a flock on the shores of Pulau Batam, near Singapore. Length barely 8 inches, tarsus $1\frac{4}{10}$, beak at front $\frac{3}{4}$; upper parts dull brown, tinged, particularly on the wing-coverts, with rufous; the forehead and underparts white, with a rufous tinge, deepest on the breast. It is rather like, but smaller than, *Æ. geoffroyi*.

ÆGIALITIS DUBIA (Scop.).

On 23rd November, 1879, I shot a specimen of this small Ringed Plover out of a party of five on the sandy strand bordering Pulau Batam. At first I thought it was *Æ. minuta*; but that bird has the basal half of the beak yellow, while in this the whole of it is black.

I shot another during November on the parade-ground at Tanglin, Singapore.

LOBIVANELLUS ATRONUCHALIS (Blyth.).

The Red-wattled Lapwing is common in Pêrak and Lârut, frequenting the edges of jheels and the swampy valleys in the jungle. I never found a nest; but they probably breed in the peninsula, as

I saw a pair near Kuâla Kangsa, Pêrak, as late as the first week in May. Earlier in the year I shot several in the neighbourhood of that place, also some few at a jheel near Sengan, lower down the river.

In my notes is the following passage:—

"Singapore, 21st November, 1879. This afternoon I shot a few Snipe and Plover in the swampy valley behind our barracks, also put up two Red-wattled Lapwing, one of which I shot. It is exactly like those I used so often to get in Pêrak; but here it is a rather rare bird, and one seldom hears its plaintive cry, so well rendered in Dr. JERDON's work by the words 'Did he do it! Pity to do it.' A male, shot at Saiyong, Pêrak, on 13th April, measured about 12½ inches in length, tarsus 3; beak red, black at its tip; orbits and wattles red; irides red-brown, legs yellow; head, neck, and breast deep black; ear-coverts, streak down each side of neck, band across upper part of the back, abdomen, and the tail white, the last broadly barred with black; upper parts and wing-coverts dull brown, glossed with metallic shades of purple and green; greater coverts broadly tipped with white; wing-quills black; the shoulder furnished with a short blunt spur; hind toe very minute. Its stomach contained vegetable matter and particles of quartz."

STREPSILAS INTERPRES (Linn.). The Turnstone.

About the middle of April, 1877, a Malay brought me a cage of eighteen or twenty Turnstones, which he said he had netted on the sands near the mouth of the Moar river; they were in most beautiful plumage.

I saw large flocks of Turnstones scuttling about at the water's edge on the beach at Pulau Nongsa during September, and shot one or two of them.

GALLINAGO STENURA (Temm.). The Pintail Snipe.

Although the European Snipe (*G. scolopacina*) is occasionally found, the one commonly met with in the Malay States is the Pintail Snipe (*G. stenura*), dozens (I think I may almost say hundreds) of it being obtained for one of the former. But in general appearance the two species are so alike that anybody not a naturalist, nor of a very inquiring nature, may easily shoot throughout a whole season in that land of the longbills, Province Wellesley, without knowing that his spoil differs in the least from the well-known Snipe of the British Isles.

But if, while resting from his labours after a few hours' plodding through mud and water under the blazing sun of those parts, he will turn out his well-filled bag and carefully examine its contents, it will be found that, with hardly an exception, the birds are " Pintails."

The tait, instead of being of soft rounded feathers, as is the case with the English bird, has eight rigid pin-like feathers on either side, though I have seen specimens in which these stiff feathers were but seven in number. This is the most marked characteristic of the species, and at once determines the identity of a specimen: but the Pintail also has the axillary plumes more richly barred than its European brother—though, unless one had some of each kind laid side by side for comparison, the differences between the two species would probably pass unobserved.

It is only at a certain season that Snipe abound in the Malay peninsula: from May to July, both months inclusive, it is hard to find a single bird; but about the middle or end of August they begin to arrive in Province Wellesley and Pulau Penang, extending to Malacca and the extreme south of the peninsula, including Singapore, ten days or a fortnight later, though they are not found in great numbers in any of these places until later in September.

However, it is impossible to lay down a hard and fast rule, as the migration is much influenced by the weather; but it may safely be said that the great body of the Snipe do not come south until the commencement of the wet and stormy period which proclaims the breaking-up of the south-west monsoon.

Towards the end of April they return north to their breeding-grounds; and I doubt if any remain to nest in the peninsula, though in Pêrak I have shot a few stragglers as late as the second week in May.

With reference to the habits of the Pintail, my experience is that, as a rule, they are not found in any number in the paddy-fields—that is to say, when the crops stand high; and though I once, at Pĕnâga, on November 6, 1877, in about three hours, bagged twenty-five couple on paddy-land, still it was the only occasion I am able to record; and then, I believe, their presence was due to the paddy being scattered about in patches and much mixed up with reeds and coarse herbage.

Their favourite ground is where the jungle has been burned, and the vegetation, just beginning to spring up, shows in green shoots above the blackened soil. Another sure finding-place is rough land, with bushes, small pools of water, and moist places scattered here and there; but everywhere it will be found that during the intense heat of the day the Snipe avoid the open country, and seek shelter from the sun under thick bushes, or in the shade of high jungle. They then lie very close, and when flushed rise with a listless flight, not unfrequently settling again after flying eighty or a hundred yards; but of course this is not the case in districts where they are much shot at and disturbed.

Though undoubtedly, as a rule, the Malay Snipe are not so wild nor so active on the wing as is the European species, still they afford excellent sport, and are by no means easy to shoot, particularly during the early morning, when, revived by the cool night air, they dart and twist along at a great pace; also among bushes it requires very quick and straight shooting to make anything of a bag.

As soon as the sun gets low they leave the covert and scatter themselves all over the country in search of food; often on moonlight nights, when out in the jungle after pig, on crossing open pieces of ground where, during the day, not a bird could be found, I have heard Snipe rise, squeaking on all sides. One most keen sportsman of my acquaintance sallied forth on one of these very bright nights; but, though the Snipe swarmed, he returned without having done more than frighten them—not to be wondered at, considering how deceptive is the light of even the most brilliant tropical moon.

During droughts, when the ground is parched and cracked by the heat, the Snipe probe the buffalo-dung, perforating the heaps with thousands of small holes in their search after the worms which collect beneath.

I think that there can be little doubt that Province Wellesley, opposite the island of Penang, is by far the best Snipe-ground in the peninsula, probably owing to its being extremely flat, well watered, cleared of jungle, and perhaps to its being very near the limit of the migration south. To a very great extent it is covered with paddy-fields; and on the rough uncultivated land bordering these the Snipe are extremely plentiful, enormous numbers often being shot in a day. One morning early in November, 1877, I bagged thirty-five couple by midday, and had quite as good sport on other occasions; but during the season of 1879, which was an exceptionally good one, the birds simply swarming, far larger bags were made, an officer of my regiment having bagged fifty-six couple to his own gun on one day, and fifty-four on another. But this represents good shooting; for it must not be imagined that the birds can be knocked down with a stick. Far from it, anything over twenty couple means really straight shooting and hard work, as the walking is bad and the heat intense.

A good retriever is very useful; but few dogs can stand the sun for any length of time. I used to keep mine closely clipped, except his head and a broad stripe down his back, which proved a great protection to his spine; but in spite of all precautions, after a time, he got altogether out of condition. Without a dog birds are often lost, particularly on bushy ground, though the Malay boys, sharp little urchins, with more intelligence than clothes, who follow and carry one's cartridges, are generally very good at marking down the dead and wounded; still a dog is preferable to the best of human retrievers.

Near Thaipeng, in the native state of Lârut, I was once one of a party who attempted to shoot Snipe from elephants; but I cannot advise anyone to go and do likewise, at least if their dinner depends on what they kill. It happened thus. We had been all day in the jungle after a rogue elephant, which had done considerable mischief; but he proved too much for us, and got safely away to the hills without giving anyone the slightest chance of a shot, though at one time we were close to him. In the afternoon, on our way home, we had to pass near a celebrated Snipe-ground of considerable extent, swampy, and much overgrown with low bushes. "Let's try and shoot some Snipe from our elephants' backs!" exclaimed one of our number. The novelty of the thing pleased all; so off we started; and a queer sight it was. Five elephants advanced in line, about a hundred yards apart, each carrying two guns; while in the intervals, but a little in the rear, came several Sikhs of the military police of the district, fine tall fellows in scarlet turbans. These followed us, nominally to pick up the spoil; but, unless it takes five men to carry one Snipe, their labours were light. The Snipe were very plentiful, and for half an hour there was a tremendous banging; but I need hardly say that the result was almost nil. Personally I expended quite thirty or forty cartridges for two Snipe and a green Pigeon; all together I do not believe the ten of us averaged a bird apiece. But it was not to be wondered at; for as "scaipe! scaipe!" resounded and up went one's gun, the elephant would make a tremendous plunge, and one's shot went anywhere but towards the object aimed at; often, I expect, much nearer the head of our mahout, or some of our Sikh followers, than was at all pleasant for them. I know it would have taken a good deal to induce me to change places with the mahout, perched as he was on the neck of the elephant, with my companion and myself slung in baskets on either side of the great lumbering brute, and firing away as hard as we could. As we sat sideways in a small cane basket, with our legs dangling over the side, straight shooting was almost an impossibility: for, to say nothing of the jolting of our animal, I, on the off-side, could fire only at birds rising to my left front, and then in a very cramped position; and the man on the near side had similar difficulties to contend with. Between these two firing-points squatted the unfortunate mahout: he never made any remark, except to his charge; but I expect he offered up a prayer of thanksgiving to Mahomet when the whole performance was over and he found his head still on his shoulders.

RHYNCHÆA BENGALENSIS (Linn.).

The Painted Snipe, as it is called, though not really belonging to the true Snipe, is a bird frequently met with by the sportsman in Malaya.

The Painted Snipe *may* be a resident and breed in the Malay peninsula, as is the case in India, though my experience inclines me to think it migratory. In any case, if not a true migrant, it certainly moves about the country, only appearing in certain districts at particular seasons. I never heard of it nesting in the peninsula, and never even saw it except during the north-east monsoon, when it is fairly plentiful, frequenting the same ground as the common Pintail. I have shot Painted Snipe in the north of Pêrak during the months of Jannary, February, and March, and found them in considerable numbers further south during October.

Out of a bag of twenty couple of Snipe shot in Province Wellesley on November 9, more than half were of the Painted species. They seem to collect in small parties; for when one is flushed two or three more are generally to be found somewhere near; but they rise with a heavy Owl-like flap, as a rule settling again within forty or fifty yards. Thus offering an easy mark, and being moreover poor eating, they are scarcely worth shooting.

The chief characteristics of the Painted Snipe are the beautiful ocellated plumage and the Curlew-like bill, curved downwards at the tip, also shorter than that of the common Snipe. The female, with the handsome chestnut throat, is larger and more brightly-coloured than the male.

GALLINAGO SCOLOPACINA (Bp.).

Compared with the Pintal species, the common European Snipe is rare in the Malay States.

LIMOSA ÆGOCEPHALA (Linn.).

Personally I did not meet with this Godwit; but Mr. DAVISON showed me a specimen caught with birdlime, at the same time as two Whimbrel, on the rocks off Changi, on the north coast of Singapore.

NUMENIUS ARQUATA (Linn.). The Curlew.

Plentiful along the coasts during the north-east monsoon. I shot a few off Changi and among the islands in the Johor Straits, but found them just as well able to take care of themselves, and just as hard to get at, as in cooler climes.

Referring to a visit I made during November to Pulau Nongsa, a small island off the south coast of Singapore, in my note-book is:—

"The tide being very low, a broad belt of coral-reef surrounded the island, affording feeding-grounds to hundreds of shore-birds of all kinds: so we landed, or rather waded ashore, in hopes of getting at the Curlew and Plover, of which we saw a great many; but, as usual, the former were exceedingly wary, and, without giving us the ghost of a chance, made off to a distant sandbank, loudly uttering their shrill cries, as if to deride the unsuccessful sportsman and warn all other birds of his approach."

NUMENIUS PHÆOPUS (Linn.). The Whimbrel.

Flocks of Whimbrel frequent the coasts during the north-east monsoon. In my notes I find :—

"Singapore, 26th November, 1879. The other day, while shooting Pigeons on Pulau Betam, we put up a large flock of Whimbrel from the belt of mangroves bordering the shore, but did not get a chance at them; but next day Mr. D.——bagged eight in two shots."

TRINGA MINUTA (Leisl.). The Little Stint.

I shot one of these Stints on Pulau Batam, near Singapore, on 25th November, 1879; it was a male in winter plumage, length about 6½ inches; head and the upper parts whitish brown, the feathers dark-shafted; the two central tail-feathers dark brown, the others dusky, all narrowly edged with white; the underparts white, dusky on the breast; bill at front ¾ inch, tarsus ¾.

TOTANUS GLAREOLA (Linn.). The Spotted Sandpiper.

This Sandpiper is by no means a rare bird; I shot several in Pêrak and in Singapore. A female, killed at Kôta Lâma, Pêrak, on 19th April, 1877, measured 9 inches, tarsus 1½, beak at front 1¼; legs dull green; irides dark brown; head, upper parts, and the wings dull brown, spotted with grey; a dusky streak passes from the base of the upper mandible to the eye; supercilium and underparts white, dusky on the breast and much streaked with brown; the upper tail-coverts pure white; tail barred with dark brown. A specimen shot in Singapore during November was less distinctly spotted than the above.

In my notes I find :—

"Singapore, 18th November, 1879. This afternoon, while Snipe-shooting in the Mount Echo valley, close behind our barracks, I came on a large flock of Spotted Sandpipers (*T. glareola*) feeding in the swampy fields, which are awful walking, letting one through at every step over one's knees into soft filth. The Sandpipers were rather wild, rising with shrill cries as soon as I got within forty or fifty yards, but settling again after flying round and round for a few minutes. Feeding with them were a great many Yellow Wagtails (*Budytes taivanus*) ; and I got several specimens of both them and the Sandpipers at one shot."

TRINGOIDES HYPOLEUCOS (Linn.).

The common Sandpiper is plentiful in Singapore and the neighbouring isles; during November, 1879, I found great numbers of them on the shores of Pulau Nongsa and Pulau Batam, and on many occasions saw them settle on the fishing-stakes, which stand five or six feet above the surface of the water. In China I once saw a Sandpiper dive and swim under water with wonderful ease. I find the following notes, made at the time, in my journal:—

"6th October, 1878, Kowloon, near Hongkong. Towards evening we left the hills and returned to our boat, near which, on the sands, we shot a few Waders. One of these, a Common Sandpiper (*T. hypoleucos*), fell wounded into a brook; and my dog ran to retrieve it; but just as he was going to pick it up, it dived like a Duck and swam *under* water a distance of over twenty yards. The stream was of no width, and the water as clear as crystal; and standing within a couple of paces, I most distinctly saw the bird propelling itself with its wings as it swam beneath the surface of the water."

PARRA SINENSIS (Gm.). The Pheasant-tailed Jacana.

Late one evening in the first week in May, while shooting near Saiyong jheel, on the Pêrak river, I was stalking a flock of Teal which had gone down on some swampy ground bordering the water, when something white darted past, which, in the dark, I took to be a Goose Teal, so fired, but found that instead of a Teal I had killed a most beautiful specimen of this handsome bird, the only one I came across in the peninsula, though in India, I believe, it is far from rare.

It was a male in summer plumage; length 17½ inches, of which the tail of four long tapering black feathers measures 5½; irides brown; beak, legs, and toes plumbeous, the toes are very long and slender, and set like the spokes of a wheel, hind claw 1⅛ inch ; underparts white, barred irregularly with black; a peculiar golden mane passes along the back of the neck; the back and scapulars are brown with a bright purple gloss; wings pure white, excepting the first primary, outer webs of second and third, and borders round the ends of the secondaries, which are black; wing-feathers very lanceolate, the first primary has at its tip a peculiar filament, the fourth is very attenuated and pointed; wing-coverts barred with grey.

PORPHYRIO CALVUS (Vieill.). The Purple Coot.

One afternoon, while Teal-shooting in Pêrak, I was wading about a jheel overgrown with weeds and aquatic plants, among which I shot a specimen, my only one, of this Coot.

Its plumage reminded me much of *Porphyrio cœruleus* of Europe; but it is smaller than that bird, also its beak and legs are not of such a bright red. It feeds principally on weeds and other green substances. The stomach of the one I shot was very muscular, and contained vegetable matter and a quantity of sand; but possibly they occasionally prey on the young of other birds, as their relation, *P. cœruleus*, which I shot in Sicily, had there the reputation of killing young wildfowl; also, when visiting Mr. WHAMPOA, a Chinese gentleman residing in Singapore, he showed me a very handsome pair of these Coots in his garden, but said he was obliged to confine them in a cage, as, when let loose, they killed his chickens.

My Pêrak specimen, a male, shot on 9th May, 1877, was 17 inches in length; neck, throat, and upper parts of the breast pale greenish blue; back of neck and the abdomen deep purple; vent freckled with grey; under tail-coverts white; wing-coverts light blue; legs, beak, and frontal plate dull red; back and scapulars dark brown tinged with green and blue. Soon after death the beautiful blue of its plumage faded.

There were two of these Purple Coots in the Botanical Gardens, Singapore, also specimens in Raffles Museum.

GALLICREX CRISTATA (Lath.). The Crested Water-cock.

This Water-fowl is very plentiful, breeding among the jheels and reedy swamps of Western Malaya. Personally I never found a nest, but in Pêrak, during April, have shot males with the red frontal plate, assumed only during the breeding-season, fully developed. The following is from my note-book:—

"Kuâla Kangsa, Pêrak, 31st March, 1877. This evening, in a very wet paddy-swamp, I shot a bird uncommonly like a Coot *(Fulica atra)*, except that its toes were very long, and without lobe, web, or any other aid to swimming; it flew with a heavy flapping flight close over the tops of the reeds. It was of black plumage, but a good deal marked with a rusty brown; also it had a little white on its shoulders; irides dark brown; length 15 inches; claws long, very curved and sharp; legs yellowish green, as was the beak, which extended up the forehead in the form of a reddish frontal plate; so I take the bird to be a young male in breeding-plumage; in the adult the iris is crimson."

Again, in my notes I find:—

"Singapore, 22nd December, 1877. To-day I got four couple of Snipe in the valley near Cluny, also shot a female specimen of the Water-cock *(G. cristata)*, which Drake flushed out of a thick patch of reeds standing in water nearly two feet deep. Though at different times I have shot dozens of these birds, I never remember finding them anywhere but in very wet places; in Pêrak they were exceedingly plentiful on all the jheels, but kept to the thick reed-beds. During last spring I shot a great many on the jheels near Saiyong and Kota Lama, and found them very good eating, though in that respect not equal to the little Goose Teal.

"The great difference in size of the sexes of this bird is very noticeable: the female I shot to-day is 13 inches in length; irides dark brown; legs and beak dull green, the latter reddish at its base; head and the upper parts dark brown; the feathers of the back, also the tertiaries, broadly edged with pale brown; chin, throat, supercilia, outer web of first primary, and the shoulder white; underparts pale rufous brown, narrowly barred with dusky brown, particularly on the flanks."

The male is a larger bird, about 16 inches in length, and, when mature, has red irides and its plumage very dark.

In Singapore I once put up a Water-cock which flew a short distance, then settled on the top of some bushes eight or ten feet above the ground, a most unusual thing for one of these birds to do. It looked most strangely out of place; so I shot it in order to be sure of its identity.

Erythra phœnicura (Penn.).

The White-breasted Water-hen, though by no means rare, is not very often seen, owing to its extreme shyness; it frequents thick covert near water. At Singapore I occassionally saw it in the hedge-rows near the lake in the Botanical Gardens.

During November, 1879, I shot several specimens on Pulau Batam; also during 1877 I got many in Pêrak and Lârut. One of the Pulau Batam birds was 12 inches in length; beak yellowish green, reddish on the ridge; legs dull green; tarsus 2¼; upper plumage dull bluish black with a slight green tinge; face, throat, and breast pure white; vent and under tail-coverts chestnut. This specimen, being immature, had the irides brown: in the adult they are deep crimson. I once saw one these birds settle on the upper branches of some trees; but they were of no height, about ten or twelve feet at the outside.

Porzana cinerea (Vieill.). The Small Water-Rail.

I never came across this Rail on the mainland; but on Singapore, in certain localities, notably the Mount Echo valley, they were very plentiful, particularly during September and October; but perhaps being out Snipe-shooting a great deal during those months I noticed them more than at other times, when I did not pass so much time in their resorts.

My notes are as follows:—

"Singapore, 7th October, 1879. Passed the afternoon Snipe-shooting in the Mount Echo valley, wading through the swampy grass-fields knee-deep in the most horrible filth—the sewage of Singapore, which is carried out from the town in large wooden tubs by the Chinese coolies and emptied over the fields as manure. The smell is most disgusting; but the valley being capital collecting-ground, in spite of the deep wading and unsavoury odours, I frequently pay it a visit.

"To-day I got some Snipe (*Gallinago stenura*), Bitterns (*Ardetta cinnamomea*), Golden Plover (*Charadrius fulvus*) and smaller Rails (*Porzana cinerea*); these last were very plentiful in the deepest parts of the swamp, and nearly every bush held one. When flushed they flew with a weak flight, with their long legs trailing behind them, for about fifty yards, then dropped and ran for the nearest covert, from which it was not easy to get them up a second time.

"A female I dissected had the ovaries much developed, stomach very muscular, full of grass-seeds, a fine thread-like weed, and a quantity of sand.

"Length 7½ inches, tarsus 1½; irides red, orbits scarlet; legs yellowish green, soles yellow; beak yellowish green, orange at its base; upper parts, the wings, and tail dull brown, with a plumbeous tinge on the head and neck; underparts, also a streak under and over the eyes, white; sides of the neck and breast bluish grey. Another I shot had the irides a reddish brown colour."

At sunset on any fine evening during September dozens of them were to be seen feeding out in the open on the swamps below Mount Echo, scuttling off in all directions directly they were disturbed.

HYPOTÆNIDIA STRIATA (Linn.).

This common Water-Rail is apparently more abundant in the south than in the north of the peninsula, as I did not meet with it in Pêrak, while in Singapore I found it, at all seasons, the most common of all the Rails. I got specimens every day I went Snipe-shooting, their favourite resorts being very wet swamps covered with low bushes.

A female I shot on Pulau Batam, on 30th September, 1879, was 10 inches in length, tarsus 1¾; irides dark brown; beak fleshy red, dusky on culmen and tip; legs dull green. Its stomach contained a quantity of dark-green substance, among which I detected the fragments of insects and the shelly covering of a chrysalis of some sort.

Another female, shot in Singapore 30 September, 1877, was slightly smaller than the above, in other respects similar. Top of head, the nape, and a streak down each side of the neck chestnut, marked with black on the crown; the wings and upper parts olive-brown, covered with narrow wavy bars of white, edged with black; the chin and throat dull white; a streak below the eye, the sides of the neck, and the breast lead-grey; abdomen, dull brownish grey barred, particularly on the flanks, with white.

RALLINA FASCIATA (Raffles.).

This handsome Banded Rail is decidedly rare; I never shot one, and saw very few in the Malacca collections. It can easily be identified by its richly banded plumage. It is smaller, also has the olive of the back more rufous than *Porzana ceylonica.*

LEPTOPTILUS ARGALA (Lath.).

The well-known Adjutant bird of Anglo-Indians is found along the Malayan coasts, but, I think, not so plentifully as the rather smaller and more darkly plumaged *L. javanicus.*

In August, 1877, I saw several Adjutants on the mud at the mouth of the Moar river.

LEPTOPTILUS JAVANICUS (Horsf.). The Malay Adjutant.

Much more common in the Straits than the last-named species: both, however, there go by the name of "Adjutant bird." I found it plentiful on the mud-flats at the mouths of most of the rivers on the west coast particularly, about the bar at the extrance to the Lârut river; but I never shot one, as on every occasion my baggage was much too limited to allow room for stowing away so bulky a bird.

It is easily tamed, and invaluable as a scavenger, particularly in a hot climate, where things do not improve by being kept. When quartered at Tanglin, every time I drove into Singapore I passed a pair of these Adjutants, which lived on the grass-plot at the roadside close to the town. They seemed very contented with their lot, never straying far away from one place, and were usually to be seen either perched on a railing, apparently buried in thought, or else gravely stalking along the edge of a tidal ditch bordering the road, on the look-out for frogs, fish, or pieces of offal that might come drifting down the stream. My dog frequently used to rush and bark at them, when they put themselves into the most absurd attitudes, if very closely assailed bending forwards with their wings upraised, necks extended, and enormous bills wide open, presenting a most grotesque appearance.

The detachment of my regiment stationed at Penang bought a pair of these Adjutants from a Malay, and kept them on the race-course just outside the Mess. The following account of the birds, their manners and customs, is given me by an officer of the detachment, who watched them daily :—

"In June, 1877, when at Penang, S. S., B—— purchased, for the sum of three or four dollars, two Adjutant birds of a black and white colour; head and bill of a yellowish colour, as was also the neck; their bills were nearly a foot in length; they possessed but very few feathers on the head and neck—in fact only a few sprouting hairs: their backs and wings were of a greenish black, and their breasts of a dirty white colour. The birds stood about three feet in height.

"They were never kept in confinement, and from the very first were allowed to roam over a large open expanse of ground, but never seem inclined to stray far, and very seldom even attempted to fly; and when they did it was rather a failure, and consisted of a succession of bounds for about fifty yards, after which they appeared to be quite exhausted.

"They were curious birds to watch, and always gave one the idea that the surroundings had but little attraction for them, as they would spend more than half the day standing motionless opposite each other, bill to bill, and with both wings outspread, forming a most ludicrous picture; sometimes they would stand like this for an hour or more; but occasionally one of them raised and stretched out one of its legs as if it were stiff; otherwise they would scarcely move a muscle. I do not remember ever hearing either of them utter a sound, though we often listened.

"They were very coarse feeders, and did not consider much before they fed, either as regards quality or quantity. On one occasion I threw to one of them, as fast as I could, one by one, several small fish about six inches in length; these he gulped down to the number of thirty-two, and even then did not appear satisfied.

"After they had been with us about a month, one morning one of them looked rather sorry for itself, and basked in the sun with outspread wings for several hours; but later in the day he lay down on the grass with his eyes closed, evidently very sick; by him stood his brother, quite unconcerned, and, as it seemed to us (for we watched him closely), unaware of anything unusual being the matter. They remained like this till late in the afternoon, when we saw the healthy bird put his head on one side, and, looking inquisitively at his sick comrade, proceed to stir him up with his back, but without making him move; and on going out we found him to be dead. To discover the cause of death a post-mortem was decided on; and B—— and myself set to work at once, and found in the bird's stomach, which was much inflamed, the legs and claws of a large Fowl, quite undigested, and probably the cause of its decease.

"The amusing part of the post-mortem was that the surviving bird stood close by to see us cut up his brother, and evidently with much pleasure; for he eagerly watched us slice off great lumps of meat, and was delighted when they were thrown to him, gobbling them up in no time; after a good meal he stalked away, very well satisfied with the afternoon's performance, apparently thinking what a pity it was he had not a brother dying every day."

ARDEA SUMATRANA. The Malay Purple Heron.

Plentiful in the jheels and paddy-swamps in Pêrak, particularly during April, when I found them in a great numbers among the reeds of the large jheel near Saiyong; as I waded about I used to see them, with their long necks stretched out and heads raised above the reeds, most intently watching my movements.

They were rather wary, though when flushed they generally flew but a short distance, and settled on the upper branches of some large trees bordering the jheel; then, under cover of the jungle, they were easily stalked. They reminded me much of *A. purpurea*, the European Purple Heron, except that they were not nearly so richly coloured as that bird. An immature female, which I shot at Kota Lama jheel, Pêrak, on 5th April, 1877, measured about thirty-six inches in length, bill at front 4¾, tarsus 5; crown of head dull bluish grey; chin and throat white; face and neck rufous brown, the latter spotted longitudinally with dark brown; upper parts dull brown, the feathers edged with rufous brown and slightly glossed with purple and green; tail and wing slate-grey; wing-coverts ashy, with pale rufous edges to the feathers; abdomen yellowish white. It had been feeding on small fishes.

HERODIAS GARZETTA (Linn.).

I frequently met with this Egret among the swamps in Singapore, generally in flocks of from fifteen to thirty.

My notes record :—

"Singapore, 21st October, 1880. To-day, while shooting Snipe in the swamp behind the barracks, I put up a party of twenty white Egrets, and, as they passed overhead, brought down one of them, a fine specimen of *H. garzetta*, in pure with plumage, but of course, at this time of the year, without the crest and the dorsal and pectoral plumes of the breeding-season.

"In length it is 24 inches, bill at front 3⅙, tarsus 4 ; legs black, blotched with green ; toes green ; soles yellow."

BUPHUS COROMANDUS (Bodd.).

The Cattle-Egret is very plentiful throughout the Malay Peninsula ; the following are some of the many references to it in my note-book :—

"Kuâla Kangsa, Pêrak, 17th February, 1877. Buff-backed Herons are very common here ; wherever there are many buffaloes large flocks of them are always to be seen, either walking about among the animals' legs, or else perched on their backs picking out ticks and other vermin. This afternoon, close to Kôta Lama, I shot a female specimen : length 19½ inches, beak at front 2¼, tarsus 3½ ; plumage white, with the exception of a faint buff tinge on the head and nape ; irides yellow ; legs black ; beak reddish yellow ; in short, the bird was in almost perfect non-breeding plumage, though another, which I shot out of the same flock shows traces of the buff back. Every evening at dusk a large flock of these Egrets fly across the river and roost in a clump of trees exactly opposite our camp."

"Singapore, 4th November, 1880. Leaving Tanglin directly after tiffin, I followed a jungle-path for a mile or two till it brought me out on an open swamp, a branch of the Mount Echo valley. Quietly parting the bushes, I looked out into the open, and found myself quite close to a large flock of Cattle-Egrets, which, unaware of my presence, were stalking about the swamp picking up larvæ and aquatic insects. After watching them for several minutes, I stepped out from my hiding-place and, as they rose, brought down a couple. The birds were so confused at my suddenly and so unexpectedly appearing almost in their midst, that they flapped about in all directions, not knowing which way to go, and gave me easy shots. One, struck by a single pellet, which grazed the top of its head, seemed to be completely dazed, and, though in other respects untouched, made no attempt to fly away nor even to walk, but stood bolt upright, quite motionless, and stared vacantly at me in a most idiotic manner : I suppose it was suffering from concussion of the brain.

"Both of the birds I shot were in pure white plumage, except a slight tinge of buff on the head ; the beak was orange, at front $2\frac{1}{4}$ inches ; orbital skin greenish yellow ; irides yellow ; legs black tinged with green ; soles green ; tarsus $3\frac{5}{12}$ inches. Their stomachs contained large spiders, several grasshoppers, dragon-flies, and small insects."

"Kuâla Kangsa, Pêrak, 8th April, 1877. To-day I shot in the country round Saiyong, and on the large jheel saw several Herons (*Ardea sumatrana*); a few Teal, and literally hundreds of Cattle-Egrets ; the last are becoming of a ruddy brown colour on the head, neck and breast, a sure sign of the approach of the breeding-season."

BUTORIDES JAVANICUS (Horsf.).

Common. I got several in Pêrak. For many weeks one resorted daily to the river-bank just below our camp at Kuâla Kangsa, and I often watched it fishing ; at length, doubtless thinking itself in a dangerous neighbourhood, it took itsef off to other grounds.

I also found this species plentiful among the islands of the Singapore archipelago. In my notes, in a description of a trip to Pulau Mongsa, is the following :—

" 23rd September, 1880..........I found Pulau Mongsa to be about half a mile long by less than a hundred yards wide, thickly wooded, but fringed with a broad coral reef, at low tide of considerable width. Near its shores were long rows of fishing-stakes projecting some feet out of the water, on which sat hundreds of small green Herons (*Butorides javanicus*). On our approach they rose in regular flocks; and, so as to be certain what they were, I shot three or four. They flew very close to the surface of the water."

ARDETTA FLAVICOLLIS (Lath.). The Black Bittern.

Personally I never shot this handsome Bittern in the Malay States; but I saw skins in Malacca collections. I killed one or two in the neighbourhood of the Canton river, South China, where I found them in thick reeds and not easily flushed.

ARDETTA CINNAMOMEA (Gm.). The Chestnut Bittern.

I found this small Chestnut Bittern plentiful in Singapore, and also on the mainland, and shot many specimens in Pêrak, Lârut, Province Wellesley, and Malacca, generally flushing them in paddy-fields.

A female, which I shot at Singapore on 30th September, 1877, was about 14 inches in length, bill at front $1\frac{1}{12}$; tarsus $1\frac{3}{4}$; irides yellow; bill pale greenish yellow, dusky on the ridge; soles pale yellow; upper parts and the tail ruddy chestnut, but much variegated, many of the feathers of the wing-coverts and back being brown with pale yellowish margins; top of head dusky; chin whitish; pectoral gorget of ruddy yellowish-brown feathers with dark brown central streaks; under-surface of the wings ash-grey with a delicate pink tinge.

Undoubtedly this was a young bird, being of such mottled plumage; moreover it was of much smaller dimensions than an adult, at least according to JERDON's description.

Another specimen, which I shot during May in the neighbourhood of Kuâla Kangsa, Pêrak, was of an almost uniform chestnut colour as regards its upper parts, but brightest on the wings and tail, and becoming brown on the back; the top of the head had a dusky tinge; underparts yellowish white; pectoral gorget boldly marked with longitudinal reddish-brown streaks; under-surface of the wings delicate pink-grey; bill at front 2 inches, in colour, yellow, the ridge dusky; legs greenish yellow; irides bright yellow, orbital region green.

ARDETTA SINENSIS (Gm.).

Certainly not so common as *A. cinnamomea*, still by no means rare in reedy swamps and wet paddy-fields. It is easily distinguished from *A. cinnamomea* by its wing-quills and tail being deep blue-black instead of chestnut.

One which I shot at Singapore on 12th November, 1880, measured 15 inches in length; tarsus 1¾; irides yellow; legs and beak pale yellowish-green, the latter dusky on its ridge; beak front 2¼ inches.

Another, from Kôta Lama, Pêrak, 22nd March, 1877, was of similar dimensions; top of head, the wing-quills, and tail black; face and the upper parts cinnamon-red, brightest on the back of the neck; wing-coverts pale yellowish brown; underparts pale yellowish white.

GOISAKIUS MELANOLOPHUS (Raffles). The Tiger Bittern.

I only once met with this magnificent Bittern, getting a single specimen, a female, near Changi, Singapore.

Length about 20 inches, beak at front 2, tarsus 2 7/12; top of head and pointed crest, passing over the nape, bluish-black; tail brownish-black; rest of the plumage chestnut, brightest on the face and sides of neck; the back and wing-coverts freckled with wavy black lines; pectoral plumes creamy brown, dashed with black and chestnut streaks; the abdomen and vent chestnut, richly marked with irregular black and white bars; under tail-coverts white irregularly marked with dark brown; wing-quills bluish-black, the terminal portions chestnut, and the extreme tips whitish.

DENDROCYGNA JAVANICA (Sykes.). The Whistling Teal.

This bird may be called the Duck of the Malayan Peninsula.

Though a migrant, it is found at certain seasons throughout all the Malay States; and I do not believe its breeding-grounds can be far north of lat. 5° N., as the migration from the lower or southern half of the peninsula does not take place until late in June, and a few months later the birds are back again. During the winter months, or, to speak more correctly, during the north-east monsoon, these Ducks collect in large flocks on the jheels and flooded paddy-fields. In Pêrak I found them particularly partial to small weedy lakes surrounded by thick jungle; and at one of these, near Saiyong, I used to see them literally in hundreds from February to April; but towards the end of the following month they got very restless, and by the middle of June most of them had disappeared, probably having gone north to breed.

I think there is little doubt that some few remain to nest near the banks of the Pêrak river, in the vicinity of Kuâla Kangsa, as at the end of June, after the main body had left, I occasionally came across stragglers in the ruddy breeding plumage. Moreover, Mr. Hugh Low, H.B.M.'s Resident at Pêrak, told me that the natives brought into Kuâla Kangsa young birds but a few weeks old, assuring him that they had been caught in the neighbourhood. This happened in January or February; so I suppose the birds breed from August or September till early in the year—that is, during the rainy season.

One cannot base conclusions on the habits of semidomesticated individuals; but it is worthy of notice that several of these Whistling Teal which, a few years ago, were turned out with clipped wings on the artificial lake in the Botanical Gardens at Singapore, though, having perfectly recovered their wings, they daily fly about the islands in search of food, still do not migrate, but remain and breed, and during September I saw several young ones swimming about with their parents. There is but little, if any, difference in the plumage of the sexes, and very slight seasonal change, though towards July specimens I shot were certainly more ruddy than earlier in the year.

During the heat of the day the Whistling Teal keep principally on the jheels, among thick reeds, and seem particularly fond of the small open pieces of water shut in by high rushes which are found in all large reed-beds. This makes them fairly easy to get at; and on several occasions, by wading quietly through the water, waist deep, the reeds concealing my head and shoulders, I came on them unawares and killed several at a shot—a great addition to one's larder in a country where fresh meat was not to be got every day.

When on open water I found them by no means easy to stalk; and even in places where I much doubt if a gun had ever been fired and they were but little disturbed, after one or two afternoon's shooting they became exceedingly wild and difficult to get near. The Malay bird can be easily distinguished from the other species of *Dendrocygna* by its small size; out of the dozens which I shot at different times I do not think one ever exceeded 17 inches in length.

A male shot at Kôta Lama, Pêrak, on 17th February, 1877, was 16 inches in length; irides dark brown, orbits bright yellow; legs and beak bluish-black; head and neck dull brown, the former dark on the crown; chin whitish; underparts ruddy brown, except the vent and under tail-coverts, which were whitish; wings black; lesser coverts and the upper tail-coverts rich chestnut; back dusky black, each feather terminating with a broad band of rusty brown.

NETTAPUS COROMANDELIANUS (Gm.). The White-bodied Goose Teal.

The beautiful, and most appropriately named, little Goose-Teal is exceedingly plentiful among the jheels and swamps of the mainland; but I never met with it on Singapore or any of the islands along the coast. In many respects it is very Anserine, whence its name, having the short high bill, pure white colouring, and hoarse cry of the Goose tribe.

The Goose Teal is generally found in small parties of from four to ten, often associating with the Whistling Teal; and I have on several occasions got specimens of both species at one shot.

They seem to prefer open sheets of shallow water to thick cover, but on being disturbed become very shy and retire to quiet creeks or back waters surrounded by jungle. Though I often found them on flooded meadows, I rarely (in fact do not think I ever) saw them actually on dry land. Their legs are so short and set so far back that probably they seldom attempt to walk, but on the water are quite at home swimming and diving exceedingly well, and when slightly wounded are very hard to secure.

I remember once trying, for nearly half an hour to catch a Goose Teal which fell winged into a shallow pool. It stayed under water a marvellous length of time at each dive, and when it did rise to the surface showed only its head, disappearing again the instant I moved; but at length I tired it out and consigned it to the bag. These birds also have the power of sinking their bodies below the water till nothing but their head is visible, hoping thus to escape notice.

One evening in Pêrak, while out bird-hunting, I came upon a small pool completely excluded from the outer world by the most luxuriantly growing jungle. From the overhanging trees long slender creepers hung down in tangled masses to the surface of the water, which was almost covered with aquatic plants. To complete this beautiful piece of jungle-scenery, in the centre of the pool was a Goose Teal, perfectly motionless; for, quietly as I had approached, it had heard me, and, thinking it was unobserved, did not rise, but, all the time intently watching my movements, slowly and noiselessly sank under the water till nothing but its head remained above the surface.

When on the wing, the flight of these birds is very rapid. Skimming close over the reeds, they dodge along at use of a great pace, and are far from easy to shoot.

They breed in holes in trees, laying several white eggs. I was unable to find a nest, but think they breed in the north of the Malay Peninsula, as near Kuâla Kangsa I noticed that during June they paired, and, leaving the open water, retired to out-of-the-way places in the jungle, often selecting the narrow creeks or inlets from a large jheel.

Concerning the mode in which these birds, Cotton-Teal as they are called in India, carry their young down from their nests to the water, I had the following related to me by an eye-witness, an officer in the Indian Civil Service. He was stationed on the Madras coast; but I forget the exact name of the place. Anyhow, one afternoon, late in June, while out riding he saw a Cotton-Teal leave a tree and fly down to a pool of water which was near; the bird's peculiar flight, slow and steady, so different from their usual rapid mode of progression, attracted his attention; and riding closer, he saw it had something resting on its back which, on its reaching the water, proved to be three or four young Teal.

My informant then sent his native servant up the tree from which the bird flew; and at about twenty feet from the ground he found the nest, containing several more young birds, which he brought down; and my friend took them home, hoping to rear them in his poultry-yard; but in a short time they sickened and died.

Specimens shot in Pêrak during May had their legs black, but much tinged with yellowish-green, which is the case, I believe, only during the breeding season. The difference between the plumages of the sexes is very marked, the female being of much duller colours than the male.

The following specimems I shot in Pêrak during April, 1877:—

Male. Length 12½ to 13 inches; irides crimson; legs and feet greenish-yellow tinged with black; webs black; face, neck and whole of the underparts pure glossy white; a deep black ring encircles the neck; top of head dark brown; back and wings beautiful metallic green with a rich purple tinge; primaries barred, and the secondaries tipped with white, thus forming a band across the wing; flanks and tail-coverts vermiculated with grey lines, like a Wigeon's back; tail greenish brown; vent black.

The *female* is of the same size as the male, but not nearly so boldly marked; its irides are dark brown; bill yellowish black; the secondaries only are marked with white; face and neck grey; breast barred with narrow black lines; underparts dirty white; top of head dull brown, with a purple gloss.

I dissected both these birds: their stomachs were exceedingly muscular, contained weed and vegetable matter, also a quantity of sand and particles of quartz.

Sterna bergii (Licht.).

I shot several of these Terns in the Straits of Johor and off the south coast of Singapore. During September, while steaming to Pulau Mongsa, several flocks passed close to our launch. They flew close to the surface of the sea and in extended order, like a line of skirmishers; all the flocks were making in the same direction; and it was about three in the afternoon: so perhaps they were on their way to some place in which to pass the night.

One shot near Johor on 13th April was from 17 to 18 inches in length, bill at front 2¼, tarsus $1\frac{1}{12}$; irides dark brown; bill pale yellowish-green; legs black; upper parts mottled all over with French grey and dusky brown; head and nape black, the feathers of the crown edged with white; forehead, underparts, inner portions of the inner webs of the primaries, and tail-feathers white.

I think this must have been an immature bird; others I shot had the legs green, blotched with black.

Sterna seena (Sykes.).

During May, 1879, I got one of these Terns alive, it having been caught by a fisherman on the shore near Malacca. It was a female, length 16 to 17 inches, bill at front $2\frac{1}{12}$, tarsus 1, bill from gape 3; in colour bright yellow; irides dark brown; head and pointed crest over the nape deep blue-black; the cheeks, a band across the upper parts of the back, and all the underparts white, slihgtly dusky on the breast; upper parts delicate French grey, very silvery on the wings; inner portions of the inner webs of wing-quills white; tail very deeply forked.

I got other specimens near Singapore during September and October.

Sterna sumatrana (Raffl.). The Black-naped Tern.

Common among the islands at the south of the peninsula. A specimen shot in the Johor Strait late in September was a male, length 13½ inches, beak at front 1½; irides dark brown; beak and legs black; tail very long and forked, the two outer feathers projecting 1½ inch beyond the others; top of head, also the face, silvery white; a black streak passes from the beak through the eye and enlarges into a board patch on the nape; upper parts, tail, and wings pale French grey; outer web of first primary black; underparts glossy white delicately tinged with a most beautiful rosy hue. Its stomach contained small fishes.

Sula australis (?).

In June, 1877, I saw several Gannets sitting on some drifting tree-trunks a few miles out to sea off the mouth of the Pêrak river.

Attagen minor (Gm.). The Frigate-bird.

On 23rd September, 1880, I got an immature Frigate-bird on Pulau Nongsa, about ten miles off the south coast of Singapore; I believe it to be the only specimen recorded as having been obtained in the Straits.

With some friends I was shooting green Pigeons as they came at dusk to roost on the island. Shortly after sunset, while waiting for the Pigeons, we saw a large bird flying towards the shore, and sailing along close over the surface of the sea. As it passed near one of our party, he brought it down. Length about 30 inches; beak and gullet pale bluish-white; feet webbed and of a dull fleshy-white; head, neck, and throat white, mottled with umber-brown, becoming dark brown on the breast and back; belly pure white; wings and tail black, tinged with green; wing-coverts brown, the feathers having whitish margins; middle claw pectinated. The bird had a very rank fishy smell.

Graculus carbo (Linn.). The Common Cormorant.

On 29th May, 1877, while returning down stream to Kuâla Kangsa, after a few days' shooting on the upper reaches of the Pêrak river, I shot what I believed to be a specimen of the Common Cormorant.

In my notes I have written:—

"Soon after daylight, as we were drifting with the stream past the village of Enggar, loud exclamations from my Malay boatmen drew my attention to two large birds which were walking about side by side on the sandbank in the middle of the river. Steering within shot, I fired from beneath the attap roof covering the canoe and killed one of them, and, wading to the bank, found I had got a fine Cormorant, the first I have seen in this part of the country. It was not quite dead when I reached it, and whilst flapping about on the sand disgorged four or five small fishes. It was a female, length 34 inches, tarsus $2\frac{1}{4}$, middle toe with claw $3\frac{1}{2}$; irides pale green; beak at front $2\frac{7}{12}$, in colour dirty white, black on the ridge; gular pouch bright yellow; head, back of neck, wings, back, and tail rich bronze slightly tinged with green, and having the feathers of the upper part of the back, also the scapulars and the wing-coverts, edged with black; lower back and sides of abdomen uniform dark greenish-bronze colour; face, front of neck, breast, and middle of the abdomen white, much mottled and streaked with brownish-black.

Plotus melanogaster (Gm.). The Indian Snake-bird.

I got one of these curious birds, looking like a cross between a Heron and a Cormorant, at Malacca; it was shot in April, out of a party of ten or fifteen, on some pools at Kessang, a marshy district in the neighbourhood of the settlement. The local bird-collectors did not seem to be familiar with it; so probably it is rare in that part of the country; but further north, in Pêrak, I met with it on several occasions, though I never saw more than two or three together. Its chief characteristics are the long snake-like neck and the beautifully marked black and silver scapulars.

H. R. KELHAM,
Capt., 74th Highlanders.

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GUTTA-PRODUCING TREES.

[The following interesting paper upon the trees which produce the "Gutta-percha"* of commerce has been placed at the disposal of the Society by the courtesy of Sir Frederick A. Weld, to whom it has been submitted by Sir Hugh Low, Resident of Pêrak.]

Sir Hugh Low, Resident of Pêrak to the Hon'ble the Acting Colonial Secretary, Straits Settlements, dated The Residency, Thaipeng, Lârut, 12th October, 1883.

Sir,—I have the honour to forward, for the information of His Excellency the Governor, a Report on the trees producing the "*gutta percha*" of commerce, by Mr. L. Wray, Junr., Curator of the nascent institution which, it is hoped, may develop into a useful collection of the natural products of this State as the Pêrak Museum.

2. The collections, when at the commencement of the current year His Excellency appointed Mr. Wray, were in a very embryonic state, and being aware of the careful habits of observation he had acquired as an amateur of considerable attainments in electrical and chemical science, and of his zealous pursuit of scientific knowledge in other directions, I requested him to devote his attention to collecting information as to the valuable product known as "*gutta percha*," together with complete series of specimens of the

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* [The unknown person who first rendered the Malay word *gĕtah* (sap, gum, bird-lime) by the Latin word *gutta*, deserves credit for some ingenuity. The accidental resemblance of the two words, and the adoption of the latter by botanists, may however be misleading as to the true derivation of the term "*gutta percha*." *Gĕtah*, in Malay, is the generic term for any kind of sticky sap which exudes from trees, plants, leaves or fruit: *perchah* means a rag, bit or strip of any stuff. *Gĕtah perchah* would thus mean *gĕtah* in strips or pieces (after being boiled), as opposed to the semi-liquid and sticky condition of the raw substance.—Ed.]

product, and the trees which produced it, such as might enable the eminent men of science at the Head of the Royal Institutions of Kew, Ceylon and Calcutta to botanically identify them.

3. Mr. Wray has zealously and successfully carried out the instructions he received, and complete specimens of several species have been made available, and their receipt cordially acknowledged, and others are in course of preparation.

4. In addition to this, Mr. Wray's scientific training has enabled him to discover that, by the wasteful means of collecting, which alone have been hitherto practised, by far the greater part of the valuable product for which the tree is destroyed remains in the bark which is left to rot in the jungle, so that not more than the merest fraction is made available for the demands of commerce.

5. The process necessary for extracting the whole of the gutta, Mr. Wray describes as simple maceration of the fresh bark shred into thin slices, or of the bark dried and pounded, a process so productive of valuable results that he considers the quantity exported from the Straits Settlements might have been gathered from one-thirtieth of the number of trees which, it is estimated, must have been destroyed to produce it.

6. In Pêrak, the larger trees had been destroyed before my attention was attracted to the manner in which it was collected. The quantity exported was rapidly diminishing, when, in 1880, I advised the Government, as the only means of preventing the annihilation of the species, the young trees of which were being rapidly cut down, to forbid the export altogether.

7. Old trees had become so scarce that we had great difficulty in securing flowering and fruiting specimens, and I have, as noticed in the diary of my late expedition to the upper waters of the Pêrak River, ascertained that the central parts of the Peninsula cannot, in all cases, as has been supposed, be trusted to produce an inexhaustible supply. On the light sandy soils which prevail there, none of the "*gĕtah taban*" trees are seen, and the natives assured me that although the kinds of India Rubber called "*gĕtah rambong*" (*Ficus elastica*) and the "*gĕtah sĕnggârip*" (*Willoughbeia*) had been common, the *Dichopsis* or *Isonandra* and the *Payena*, which is nearly of equal value, were quite unknown. These were, how-

ever, very common on the ranges of mountains near to the Straits of Malacca and on the lands bordering the sea-coasts, where the climate is much more moist and the soil is a stiff clayey loam resting upon granite, while the lighter soils of Upper Pêrak are on slates, schists and other metamorphic rocks.

8. As the more economical mode of dealing with the product of the "gutta" trees brought to notice by Mr. Wray—collecting the bark instead of the gum—will be of great importance to such States as still have a supply, I would recommend that Mr. Wray's Report be published in the Straits Settlements *Government Gazette* or in the Straits Branch of the Asiatic Society's Journal, so that, what there seems no reason to doubt, is a valuable economic discovery, which it is quite likely may be equally applicable to other gums or India Rubber-bearing trees, may be made known as widely as possible. It might even, with advantage to the commerce of the Straits Settlements, be translated into Malay.

HUGH LOW,
Resident, Pêrak.

Mr. L. Wray, Jr., to Sir Hugh Low, Resident of Pêrak, dated the 25th September, 1883.

Sir,—I have the honour to inform you, that in pursuance of the request you made some months ago, I turned my attention to the study of those trees from which the Gutta Percha of commerce is procured; and I now beg to present to you my Report, embodying the result of those studies up to the present time; and solicit your special attention to that portion which relates to my discovery of the large quantity of Gutta Percha that may be extracted from the bark, which is now entirely wasted.

I have sent botanical specimens, and, in most cases, samples of gutta and wood, of nearly all the trees I have mentioned, to the Royal Gardens at Kew, and also to the Royal Botanic Gardens, Calcutta, and the Royal Botanic Gardens, Ceylon; so that when the eminent botanists at those establishments have examined and compared the several specimens, the mystery in which their botanical identification has been hitherto so completely enshrouded will, I venture to hope, be satisfactorily solved.

Gĕtah Taban Merah. (*Dichopsis Gutta*, or *Isonandra Gutta.*)

This tree, from which the best kind of Gutta Percha is obtained, grows, or rather used to grow, throughout the jungles of the plains of Pêrak and a short way up the sides of the hills.

It seems to like a considerable amount of moisture, and will even grow with its roots in a running stream. It is a tree of large size, attaining a diameter of 4 to 5 feet, and a height of between 100 and 200 feet.

It has large thin buttresses around its base, which often present, on their upper portions, a convex profile, and, on a large tree, attain a height of 6 to 8 feet, and a span at the base of 4 to 5 feet from the trunk. As far as I have yet seen, they never form an arch, but have their lower parts buried in the earth, from the trunk to their extremities.

When growing in the forest, the tree has a clean, straight appearance, the former being due apparently to the bark peeling off in irregular pieces. The bark is of a rich brown-red colour, and from one-third to half an inch in thickness.

Inside the epidermis it is of an Indian-red tint; and when cut, the milk white sap oozes out, at first in small beads, which, enlarging, soon join and covers the injured part with a coating of a cream-like consistency. The leaves are lanceolate on a young tree, and roundish oval with abruptly acuminative points on a tree of mature growth. The margin is entire, and they are covered on their undersurface, with minute silky warm-brown hairs. The leaf stalks and young wood are also covered in a similar manner, which gives the whole tree, when looked at from below, a brownish tint, by which the tree may generally be recognised. The upper surface of the leaf is dark green, and the veins are not prominent.

The calyx consists of six sepals, three of which are superior to the others, and alternate with them.

They are coated, like the backs of the leaves, with silky-brown hairs. The corolla is white, and is divided into six petals. The style, which is simple, is sometimes persistent, and may be seen on the ripe fruit. There are six ovules. but one or two seeds only arrive at maturity.

On the apex of the young fruit, the six carpels of which it is formed can be distinctly traced. The fruit is coated, like the backs of the leaves, with brown down; its flesh is soft, and it is sweet, but it has a disagreeable flavour of gutta percha.

The seeds are very oily, and they are, together with some of the seeds of nearly allied species, collected by the Malays and the Sakais, who dry them in the sun for some days, and then express the oil by putting them between two flat pieces of wood, and applying pressure by clamps and wedges.

The oil, which is solid at the ordinary temperature (that is up to 90°), is highly esteemed for cooking purposes. Birds, squirrels, monkeys, &c., are very fond of the fruit and of the seeds, which adds to the difficulty of obtaining them.

It flowers in the month of March, and ripens its fruit in June; but the Malays assert that it only fruits once in three or four years.

The gutta of this variety is red, and the colour is not due to an admixture of bark, as is frequently stated. It is probable that other varieties of gutta may be sometimes mixed with bark to make them look like *Taban Merah*, and so command a higher price than they otherwise would; but the true *Gĕtah Taban Merah* is red *per se*, and the water in which it is cleaned, although changed many times, still becomes deeply dyed with that colour. Specimens of this, in fruit, together with wood, bark, and gutta, I sent to the Royal Gardens at Kew, Calcutta, and Ceylon, on May 30th, 1883.

Method of collecting the Gĕtah Taban Merah.

A tree having been found, a staging of saplings, tied together with roots or rattans, is erected round it, so that it can be cut above the spreading buttresses. The tree is then felled with a little Malay axe called a "*bĕliong*," and as it lies on the ground, V shaped rings, about one inch broad, are cut in the bark, at intervals of 15 to 18 inches, all along the whole length of the trunk, and of the large branches, with a heavy chopping knife, called a "*parang*." These cuts soon become filled with the white cream-like sap, and in about half an hour, the gutta will have separated from the aqueous portion of the sap, and may then be removed, by rolling a small ball of it round in the cuts, to the edge of which the coagulated gum adheres, and forms a disc, varying in size, according to the number of scores it is rolled in.

These discs are then boiled in water, and made into balls, and sold by the collectors to the men who export it to Penang or Singapore.

The gutta is, at first, pure white, but soon changes to pink, and finally to a brownish-red. The water in which the gum is boiled becomes a dark red-brown, and this colouration is the most distinctive feature that this variety of gutta possesses, and by which it may be easily recognised.

The air seems to have on the sap an effect analogous to that of rennet on milk, coagulating the gummy portions so rapidly, that only a small quantity of their watery stuff runs out of the cuts, all the gutta percha remaining as a soft spongy mass in the scores.

The amount of gutta obtained from a single tree, appears to have been greatly over-estimated in the accounts that have been written on the subject; and exceptionally large yields from gigantic trees have been erroneously quoted as being an *average* product, which is clearly by no means the case.

I had a tree felled, that was two feet in diameter (at six feet from the ground) and about one hundred feet high, the age of which I estimated, from its annular rings, to be over one hundred years. It gave only 2℔ 5 oz. of fairly clean gutta, valued by a Malay dealer at $1.20 per catty, or 3*s*. 3*d*. per pound, so that the product of this tree was worth only 7*s*. 6*d*.

Some say, that if gutta trees are felled in the height of the rains and when the sap is rising strongly, they then yield more gutta than at other times; but I have had no means of testing the truth of this assertion.

Gĕtah Taban Sutra. - Dichopsis* ——.

This tree is usually confused by the Malays with the preceding one, but is very different to it in many respects. It grows on low hills, and, the Malays say, will only thrive in sight of water; and those I have seen certainly bear out this idea, for they were all near the bank of some stream, and at an elevation of about 500 to 600 feet above sea level.

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* Sutra=silk.

It has much the same appearance as the *D. Gutta*, but the leaves are smaller, and their backs have a yellower shade of brown, and the buttresses are much smaller, and have a concave outline. The bark, which is dark brown, is smooth, and shews, by small oval indentations, the places where the branches have been, when the tree was young. This is a feature I have not noticed in any other gutta, and may, I think, be taken as characteristic.

The flowers have a reddish tinge, and the fruit is coated like the backs of the leaves, and is oval in form, and about the size of a mussel plum.

Its gutta is pale reddish-brown (like *Gĕtah Sundik*) and the water in which it is boiled does not acquire a red colour. It coagulates nearly as quickly as *Taban Merah*, and is collected in the same way.

The specimens I collected were obtained from the Ulu Kenering, Pêrak. The tree was 12 inches in diameter at 3 feet from the ground and was in fruit when felled on the 17th August, 1883. The flower was obtained by a Malay about 10 weeks previously.

Gĕtah Taban Puteh (*White*). *Dichopsis Polyantha?*

This tree cannot be told, by its outward appearance, from *Dichopsis Gutta*, except that its leaves are rather larger.

It has large buttresses, with convex tops, and the bark is nearly of the same shade, but rather browner. The fruit also seems to be similar, and the flowers are white; so that it is not until the tree is felled, that any very distinctive character appears. It is then found that the sap, which is much more copious, does not coagulate quickly, and when it does, it is of a dirty white colour, and has a much higher softening point than any of the other kinds, even boiling water not being sufficiently hot to thoroughly soften it. This tree grows on the hills, up to an elevation of 2,500 feet above sea level.

I have never seen it growing on the plains, nor in fact lower than 1,800 feet.

It ripens its fruit in the month of February.

The gutta is collected by felling the tree, ringing the bark, and placing leaves, bamboos, &c., under it to catch the sap; which is afterwards boiled, and the natives often add salt to hasten its coagulation.

It is frequently adulterated with the gutta from Kayu Jelutong, and two or three of the Bassias.

The usual method of mixing them is to do so before the sap has coagulated, as afterwards, owing to the high nelting point of *Taban Puteh*, they cannot be so easily and intimately combined. A tree of ten inches in diameter, at four to five feet from the ground, gave 2℔ 11oz. of fairly clean Gutta Percha.

Gĕtah Taban Puteh (Variety).

This variety differs from the above, in having smaller leaves, and in the shape of the fruit, which is longer in proportion to its breadth.

I have found it growing on the hills at 2,300 feet elevation; and it ripens its fruit in the month of February.

*Gĕtah Taban Chayer.** *Dichopsis* ——.

This tree I have found growing at 600 feet above sea level; and it attains a large size.

The bark is reddish-brown, and the wood is hard and white, with a dark red centre.

The backs of the leaves are, when young, of a golden brown, but full grown ones are silvery.

They have not the points of the leaves that are present in most other varieties of Dichopsis.

The flower, which appears about the middle of September, is pale green, and very small.

The corolla has a six-toothed limb, the teeth being nearly triangular in shape, and so thin as to be almost transparent.

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* Chayer=liquid.

The diameter of the flower is about $\frac{3}{16}$ of an inch.

In the throat of the corolla are inserted, by short filaments, twelve anthers. They are placed alternately in the centre of the teeth, and at the junction between two teeth.

The style is simple, and of such a length that it projects beyond the petals, in an unopened flower bud. It appears to be often persistent.

The gutta coagulates very slowly, hence the native name "*Chayer*," which means watery, &c.

The gutta, which seems to be of good quality, is of a dirty white colour, but may be easily distinguished from *Taban Puteh* by its lower softening point, and the tree, by its having small concave buttresses.

Gĕtah Taban Simpor. Dichopsis Maingayi?

This tree may be readily distinguished from the foregoing by its large dark green leaves, and by its prominent veins at the back, which are covered by coarse, silky light-brown hairs, the back of the leaf itself being only sparingly covered by them.

The bark is about half an inch thick, rough, and of a reddish-brown colour, much covered by a greyish lichen. It has medium-sized buttresses with a concave outline.

One tree that I measured was three feet three inches in diameter, at six feet from the ground, and from that height the buttresses sloped out until they reached the ground; having a spread of about three feet from the trunk.

The flower is white, and comes out in the beginning of April, or the end of March; but its fruit I have not yet seen.

I had one tree felled, which, at three feet from the ground, measured seventeen inches in diameter, and sixty-three to the first branch. The weight of gutta obtained was 12oz. The sap, by the aid of heat and stirring, coagulated in twenty-three hours after tapping.

This gutta is sold under the name of *Gĕtah Puteh.* The tree grows on hills up to about the same height as *Taban Puteh.*

Gĕtah ——. *Dichopsis* ——.

This is very much like the foregoing, but the leaves are of a lighter green, and are not so much coated with hairs; the bark is smooth.

I have not yet seen the flowers, but the fruit is green, smooth, devoid of hairs, and ripens in August. I found it growing near the *Taban Sutra.*

Its gutta is slow in coagulating and softens at a lower temperature than the last named variety; and it becomes rather sticky when heated, and remains so for some time after it has cooled.

Gĕtah ——. *Dichopsis* ——.

This tree has large, glossy, dark-green leaves, the backs of which are coated with rich warm chocolate-brown hairs, more densely on the veins than elsewhere, and the midrib is coated, in a similar manner, on the top surface of the leaf, for about two-thirds of its length.

The bark is very rugged and greyish-brown in colour, containing so little gutta that it is not worth collecting. I have found it growing on hills, about 800 feet high; but, as yet have not been able to procure flowers, or fruit.

Gĕtah Taban ——. *Dichopsis* ——.

Trees of this variety are said to be growing on the Gûnong Miru range, near Kuâla Kangsa, to have small leaves, and to yield gutta of good quality; but I have not yet fallen in with it, nor have I had an opportunity as yet of collecting any specimens of it.

Gĕtah Sundik. Payena Leerii.

This variety grows in swampy places near the coast, and I found one tree with its roots in a small creek, the water of which was quite salt, and only a short distance from the regular Mangrove trees fringing the stream. The leaves are small, shiny, and have a reddish tint when young. The bark is about three-eighths of an inch thick, and dark brown in colour, moderately rough.

The flowers are white, and the fruit is sweet, and eaten by the Malays. Its gutta is like Taban Sutra in appearance, and is collected by scoring the bark, catching the sap, and boiling it, until it coagulates. A tree measuring two feet and eight inches in circumference, at three feet from the ground, and 38½ feet to the first branch, that I had felled, gave 6½ oz. of gutta.

Gĕtah Sundik. Payena ——.

This is a tree much resembling *Payena Leerii*, but differing from it in the leaves being longer in proportion to their breadth, the fruit and seed smaller, and the bark, which is reddish-brown, is only about one-half the thickness, and consequently the yield of gutta is much less (the yield seeming to be in proportion to the thickness of the bark). This variety, therefore, is less valuable commercially than the thick-barked kinds. I may observe that it grows in swamps, like the *Leerii*.

Gĕtah Gahru? Bassia ——.

This is one of the Bassias, nearly allied to *B. Motleyana;* and it grows on the hills up to an elevation of 2,600 feet. The bark is light grey, and the wood seems to be of good quality.

The leaves are dark green, and the flowers white.

The fruit is reddish-brown, and covered with silky hairs, like that of *Dichopsis Gutta.*

The style is often persistent. Its gutta is white and hard, and is used only for mixing with better classes of gutta.

There are several other Bassias which yield gums that are used for mixing also; but I have not as yet obtained any botanical specimens of them.

Kayu Jelutong. Dyera ——.

The gum from this tree, is known as *Gĕtah Jelutong*, and is employed in the same way as that from the various kinds of Bassia.

The word "*Kayu*," means *wood*, but it is at times used by Malays instead of "*Pokok*" a tree, where they consider that it sounds better.

This tree is one of the loftiest to be found in the jungle; and has blackish-grey bark (white inside) which yields great quantities of white sap when cut into. It bears large bean-like pods, in pairs.

Its leaves are green above, and bluish-white beneath, and arranged in whorls at intervals, with seven leaves in each. The wood is white and very soft, and is largely used by the Chinese for making coffins, for which purpose it it well adapted, as it is light, and decays very rapidly when exposed to moisture.

ON THE GREAT LOSS OF GUTTA, RESULTING FROM THE WASTEFUL MODE OF EXTRACTION EMPLOYED BY THE MALAYS.

Whilst engaged in collecting specimens and information respecting the gutta-producing trees of Pêrak, I was greatly struck by the exceedingly small amount yielded by even large trees, by the present Malay method of ringing the bark; which led me to an examination of the dried bark, with a view to ascertain, by a series of careful experiments, what proportion of the whole amount of gutta contained in a tree was actually left in the bark after the usual process of extracting it had been performed.

With this object, I had, on the 24th of May, 1883, a tree of *Gĕtah Taban Simpor* felled, and scores cut in the bark, at distances of fifteen inches along the whole length of the trunk; and obtained 12 oz. of gutta. Some two or three days after, I had some of the bark removed, and on the 29th, I cut some of it up into thin slices, across the grain, and boiled them in water for a short time when I found that gutta had been expelled, and remained as a slight and irregular coating on the chips. This I picked off, and weighing it, I found the yield to be 3½ per cent. of the weight of the wet bark operated on.

Encouraged by this simple and satisfactory experiment, I next had a weighed sample of bark pounded in a mortar, and then transferred it to a glass vessel, and boiled it in water.

In a few minutes, the gutta formed itself into small detached white flakes, and by stirring, collected into a mass, which was easily removed from the flask, and purified by reboiling in clean water. By this method, the sample of *wet* bark yielded 5.3 per cent. of clean white gutta.

Another weighed sample of bark, was cut up and dried in the sun, and then put into chloroform, and after standing some hours, with frequent shakings, the liquid was poured off, and allowed to evaporate; fresh chloroform being added to the bark to extract any gutta which remained in it. The total product thus obtained was 5.7 per cent. of the weight of *wet* bark used in the experiment.

I next took a weighed sample of wet bark and cut it up into small chips, and dried it thoroughly, and found as the result of several experiments, that it lost 50 per cent. of its weight in the process.

The following deductions may be made from these results:—*Firstly*, that the wet bark, which is now allowed to rot in the jungle, contains fully 5.7 per cent. of its weight of Gutta Percha, or when dried 11.4 per cent.; and *secondly*, that by simply pounding or rasping, and boiling the bark, nearly all the gutta which it contains may be extracted.

After the tree was felled, I made careful measurements of it, and weighed portions of the bark, so that I could calculate the total weight on the trunk of the tree, up to the first branch, which I found to be 530lbs. when in the wet state.

Now if we take 5.3 per cent of this, as being the amount of gutta, that may be extracted by the process of pounding and boiling, already specified, we find that it would yield 28℔. over and above the 12oz. which were obtained by the ordinary Malay method; or, to put it in another way, that for every pound of gutta collected at present, 37℔. are wasted!

In the Kew Report for 1881, I find it stated, that in the year 1875, the export of gutta from the Straits Settlements and Peninsula, was estimated at ten millions of pounds weight.

I have no means of ascertaining the accuracy of that estimate, but accepting it as being tolerably correct, we must, from my experiments, come to the conclusion, that even if we take the amount of gutta wasted, at only thirty times the weight of that collected, there were, during *that one year*, no less than three hundred millions of pounds, or putting the price at only 2*s*. 6*d*. per pound, £37,500,000 sterling worth of Gutta Percha thrown away, and utterly lost!

To fully realize the importance of this subject it must be borne in mind, that this vast destruction of these valuable trees (which are of such very slow growth) and of this *material*, on which the communication of the world may be said in a measure to depend, is going on *every* year, without any cessation whatever.

It will be noticed, that I have left out of my calculations, all the bark on the upper part of the trunk, and on the branches, which however is just as rich in gutta, as the lower portion of the trunk: even the leaves contain a notable proportion. I have tested, also, other varieties of these trees, and have obtained almost identical results, therefore I need not enter into further details.

The question naturally arises, can the bark be broken from the trees, and dealt with in the country, or can it be dried and sent to Europe, to be ground up and treated in the manner I have described, or in some other way sufficiently economical, as to be commercially successful? This question deserves the most anxious attention, especially of those who are engaged in the working up of this material; for if it can be successfully accomplished, then the same supply could be furnished, with *one-thirtieth* of the present annual destruction of trees!

With the object of having this point so far tested, I have collected some bark, and am sending it to the Royal Gardens at Kew, with a request to have it sent to one of the large manufacturers, so that a report may be obtained from them on the subject.

The labour involved in stripping the trees, carrying out the wet bark from the jungles (where no roads, or even paths, exist), drying it, carrying it to a port, and thence to England, are items of expense, which must not be overlooked. At the same time, it must also be remembered, that some other jungle products, quite as bulky, and not so valuable, are yet exported with profit.

If the gutta contained in the bark can be profitably extracted, the planting of those trees on waste lands, might possibly be undertaken by Government, with every prospect of success.

The variety that seems to be most easily grown, is *Payena Leerii* (Gĕtah Sundik).

This tree fruits freely, and will thrive on the swampy plains near the coast; and is said by the Malays to grow fast. Its wood is hard, with a close grain, and takes a good polish, therefore may be of some value as timber.

I have tried experiments in making cuttings of some of the Dichopsis, but have not had any success as yet; although it is probable that they may be propagated by this means, when the proper mode of effecting it is found out.

I have not tried *Payena Leerii* as yet, but hope to be able to do so very shortly.

L. WRAY, Junr.

SHAMANISM IN PERAK.

SOME acquaintance with the black art is essential to every Malay medical practitioner. Simple remedies for wounds and bruises are generally well understood, and some of the more common diseases—such as fever, small-pox, &c.—are often successfully, if not skilfully, treated with native remedies. Bone-setting, too, is a branch of the healing science in which Malays sometimes shew much expertness. But, if the cause of a disease is not apparent, or if such alarming symptoms as insensibility or delirium set in, it is usually presumed that evil spirits are at the bottom of the mischief, and sorcery, not medicine, has to be resorted to. Arabic works on medicine have been translated into Malay, and there may be read learned disquisitions on the parts and functions of the human body, which, in point of scientific accuracy, are of the age of GALEN and ARISTOTLE. Demoniacal possession, though it has always been a popular theory among the Arabs (in common with other Semitic nations) for explaining various forms of disease, is not an idea which the Malays have imported from the West. Their beliefs regarding the distribution, powers and manner of propitiation of the evil spirits, to whom they often ascribe human disease and suffering, are relics of the days when spirit-worship was the religion of their primitive ancestors. The early rites of the aboriginal inhabitants of Sumatra and the Peninsula must have been modified at some period by Hindu settlers from India, for traces of Brahminical worship are traceable in the rude chants and invocations sung by Malay *pawangs*, to this day, by Muhammadan sick-beds. Where Muhammadanism is strongest, namely in the sea-ports and European settlements (whence a constant communication with Mecca is kept up), Malay ideas on the influence of devils on disease partake more of the Semitic type. The evil spirits are *sheitan* or *jin*, and pious Arabic sentences are used as charms and invocations. But in remoter districts, downright heathenism may be met with. The demons to the terrified villagers of many an inland *kampong* have a distinct personality. They must be met by the employment of other demons to counteract their influence, or they must be propitiated by bloody sacrifices.

In the State of Perak, it is usual to ascribe nearly every disease to supernatural agency. Medicine is often dispensed with altogether, and all hope of recovery is made to rest on the result of the incantations of professional *pawangs*. According to the belief of the people (professed Mohamedans for generations and generations !) the mountains and rivers of their country, the ground on which they tread, the air which they breathe, and the forests in which they seek for rattans, gutta, gums and other produce, abound with spirits of various kinds and of varying powers and dispositions. The malicious *bajang* is the most dreaded, for he is a goblin of inveterate hostility to mankind. Scarcely less formidable is the *langsuyar*, a kind of "white lady" or "Banshee," who may be heard sometimes amid the darkness of a tropical night moaning among the branches of the trees or soothing the child which she carries in her unsubstantial arms. The hunter spirit (*hantu pemburu*), who with his wife and child sometimes rushes past the peasant's huts at night in a whirlwind, pursuing with his four ghostly dogs an unseen quarry, is a potent source of evil, and there are many others too numerous to mention.

When the malice of some one of these many demons has caused sickness in a Malay family in Perak, help is summoned in the shape of a *pawang*, or medicine-man, who has a catalogue of spells at his command and is known for his familiarity with evil-spirits. The diagnosis may be effected in two ways. Either the *pawang* becomes entranced and sees *(tilik)* in his disembodied form secrets concealed from ordinary mortals and is able on recovering sensibility to declare the nature and cause of the disease, or else he calls down *(menurunkan)* some familiar demon (whom he has probably inherited from his *guru* or preceptor), and, becoming possessed by him, speaks, at his prompting, words of wisdom or folly as the case may be.

Some years ago I was a witness at a *kampong*, or village, in Perak of the ceremonies performed in a Malay household for the recovery of a member of it who was lying dangerously ill.

The patient was a young married woman, little more than a child in years, whose first baby was only a few days old. The symptoms, which declared to the Malays so plainly the agency of evil-spirits, were probably paroxysms of puerperal fever and these had left the patient so weak that when I saw her she was lying in an insensible state.

The scene was the centre portion of a large Malay house feebly lighted with two or three oil lamps on the floor. The sick girl lay on a bed in a recess formed by curtaining off a space on three sides the fourth being open. Opposite to the patient, facing her left side as she lay on her back, sat the *pawang*, Che Johan by name, a big muscular Malay, grasping a large bunch of leaves in each hand. Between him and the bed were the lamps above mentioned. On the other two sides of a square, of which the lamps were the centre, were ranged the people of the house, neighbours, visitors and strangers according to their respective ranks. I occupied the place of honour, being nearest to the head of the curtained recess and having it on my right hand. All the men present, myself included, sat cross-legged on the floor. Round the couch were eight or ten women watching every movement of the sufferer and prepared to restrain her if she became violent in her delirium. The whole building was crowded with people, figures being discernible wherever the flickering light of the lamps happened to shed a transient gleam. Polite salutations were exchanged and a few expressions of condolence and sympathy addressed to the relations. The latter described the manner of the diabolical seizure and the behaviour of the sufferer when possessed. It was agreed on all hands that the poor girl lying insensible before us was the victim of demoniacal possession, and that her only chance of recovery lay in the exorcism of the devil who was in her.

Presently the sound of a small drum called attention to the proceedings of the *pawang*.

The drum was beaten by a wild-looking mœnad, who at the same time commenced a shrill chant addressed to the *hantu blian*, or tiger-spirits, to which class of demons CHE JOHAN's familiar belongs. The air was not unpleasing, the words were difficult to catch, but the lines flowed in an easy rhythm and the metre was very regular. A performer of this kind is essential to every *pawang*, and, as in the present instance, is very often his own wife. She is commonly called *bidu*, or (in cases of royal *séances*) *biduan*.* In the invocation of the tiger-spirits, however, a peculiar nomenclature is adopted for everything, the *bidu* becomes *pengindin*, and the drum which she beats (which has only one end of the cylinder covered) is called *katubong*.

The *pawang*, naked from the waist upwards, had bound about him a couple of cords which crossed the back and breast, being brought over one shoulder and under the other arm respectively. He also wore strings round his wrists.

These cords are supposed to protect the *pawang*, or medium, from the malevolence of the evil spirits by whom he may be possessed. The same idea is found in Ceylon. According to the *Mahawangso*, Vishnu in order to protect Wijayo and his followers from the sorceries of the Yakhos, met them on their landing in Ceylon and *tied threads on their arms*.† Among the people of Laos, too, the same virtue is ascribed to ligatures of thread over which a charm has been pronounced. "Le grand reméde universel, c'est de l'eau "lustrale qu'on fait boire au malade, après lui avoir attaché des fils "de coton bénits aux bras et aux jambes pour empêcher l'influence "des genies malfaisants."‡

As the *pengindin* screamed out her chant, the *pawang* seemed to become subject to some unseen influence and to lose control over himself. Sitting rigid at first, holding in each hand a huge bunch of leaves (*daun changlun*), he presently began to nod like a man overpowered with sleep, then he sniffed at the leaves, waved them over his head, and struck one bunch against the other. Finally, he fell forward burying his face in the leaves and sniffing in imitation of a wild animal. He was now on all fours, and became as violent as the necessity of keeping to the circumscribed limits of his mat would permit. He growled and roared and worried invisible objects on the mat. Presently he sat up again, striking his chest and shoulders with the bunches of leaves, and soon afterwards the music stopped. We had now before us, not CHE JOHAN, but simply his body possessed for the time being by the tiger-demon—*bujang gĕlap* or *the dark dragon*. Henceforth, as long as the *séance* lasted, he spoke in a feigned voice, pronouncing Malay words with the peculiar intonation of the Sakai aborigines and introducing frequently Sakai words and phrases unintelligible to most of the Malays present. Every one who spoke to him addressed him as "Bujang Gĕlap." The master of the house was the first to do so. Pointing to the insensible form of the poor girl on the couch beside him, he explained that she was grievously attacked by some power of evil, and asked "Bujang Gĕlap" to put forth his supernatural power to expel the demon that was afflicting her. The latter asked a few questions, said the case was a difficult one, and then commenced some fresh incantations.

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* Sansk. *vidhavâ*, a widow; Lat. *vidua*.
† Tennent's "Ceylon," I, 340, n.
‡ Pallegoix—"Description de Siam," I, 43,

Returning to his mat, which he had temporarily quitted to look at the patient and to converse with the family, he took up a handful of *bertih* (rice parched in the husk) and scattered it broadcast around him. Then, after much growling and muttering, he rose to his feet and performed a singular dance to the accompaniment of the shrill chant and monotonous tom-tom of the *pengindin*. Presently he danced forward past the lamps close to the bedside of the insensible girl, and then himself chanted a long incantation commencing "*Hei————i————i————i————i jin*" (O! spirit) the first word being enormously lengthened out. Then he sprinkled the couch and the patient with *bertih* (parched rice) and sprinkled her with *tepong tawar*, a fluid held in a brass bowl and showered about liberally by means of an *aspergium* composed of a bunch of fresh leaves. Then once more he returned to his mat, and the wild chorus of the *pengindin*, which had been momentarily stilled during the ceremonies by the bedside, burst out once more. After this the *pawang* was again seized with the violent symptoms which had attended his first possession by "Bujang Gĕlap." He roared and growled and sniffed about uneasily until it was evident from his movements that he wanted to get under the mat. An accommodating person sitting close by lifted up the mat for him and he crawled under it on all fours and lay down entirely concealed from view. The chorus and the drum went on, and I hardly knew which to admire most—the physical endurance of the woman who sang so persistently at the top of her voice without any symptom of fatigue, or her marvellous memory. The invocations were very long, but she never seemed to hesitate for a word. There must, however, have been a good deal of repetition, I imagine.

After a retirement which had lasted for about a quarter of an hour, during which he had kept perfectly still and motionless, the *pawang* shewed symptoms of returning vitality. The mat was removed, and he resumed his seat upon it, yawned, uttered a few ejaculations in his feigned voice, and then sat up to be questioned. A desultory conversation then ensued, the *pengindin* acting as interpreter when the Sakai dialect used by "Bujang Gĕlap" was unintelligible to the audience. The result was declared to be that the tiger-spirit had identified the demon which was causing the suffering of the sick person present. A thrill of horror went round the assemblage when this was announced to be a dumb *langsuyar* (banshee). The correctness of this finding was then discussed and it seemed to command popular favour, for it was universally remarked that the patient had been insensible for two whole days, during the latter part of which time she had been quite silent. This was now, of course, accounted for by the dumbness of the evil spirit which possessed her.

The women round the sick-bed now said that the patient was trying to move, and all turned to look at this manifestation of demoniacal power. It was only a momentary access of delirium marked by convulsive movements of one arm, rolling of the eyes and movement of the lips and jaws. No sound escaped from the sufferer, another proof of the correctness of the *pawang's* diagnosis, and presently she was still again, after many fervent ejaculations of *Astaghfir Allah* (I beg forgiveness of God) from those present.

"Bujang Gĕlap" continued his efforts for the cure of the patient for a long time. Again and again he strewed the place with *berthi* and sprinkled the patient with *tepong tawar*. Once he charmed eight grains of *bertih* which were put into her mouth. He chanted long invocations, danced wild dances, and beat himself with his bunches of leaves. But all in vain, the dumb *langsuyar* still held possession of the sufferer. In the intervals of the ceremonies, the *pawang* conversed occasionally with members of the family, always retaining his assumed voice and using Sakai phrases. He even condescended to accept a Malay cigarette (*roko*), which he called by the Sakai word *nyut*.

At length he pleaded fatigue, and gave place to an old man who dealt with a different class of demons altogether. The spirits which he professed to be able to influence are the *hantu sungkei*, or the demons of the Sungkei river, a particular district in Perak.

His method of procedure differed a good deal from that of the *pawang* of the *hantu blian*. Instead of the old woman with a little drum, he had a male *bidu* with a large round tambourine. A single bunch of *pinang* leaves replaced in his hands the two large bunches of *daun changlun* which "Bujang Gĕlap" had carried. After the preliminary sprinkling of *bertih* by the new *pawang*, the *bidu* commenced to chant an invocation to the Sungkei spirits, addressing them in turn by name. The symptoms of possession on the part of the *pawang* were convulsive shaking and shivering, especially in the hand and arm which bore the bunch of *pinang* leaves. Both tune and metre were quite different from those employed in addressing the *hantu blian*. The old Sungkei *pawang* proved a failure, for after endless chanting and after he had been possessed successively by "Panglima Raja," "Anak Janggi," "Hulubalang Raja" and "Mambang Dundang," all powerful Sungkei spirits, he was unable to declare anything, and left us as wise as we were before.

What a common incident in Eastern tales is the dire illness of some lovely princess, for effecting whose recovery an agonised father offers half of his kingdom and the hand of the lady in marriage! There is always some favoured hero who applies some magical remedy and restores the princess to health after the medical profession has been completely baffled. But think of what the patient has had to undergo at the hands of the unsuccessful competitors, before the right man takes the case in hand! Think of all the doses administered by rival doctors, or prepared by sympathetic friends, each one assured that he is going to cure the disease and win the King's favour! I have been reminded of these things sometimes when I have seen or heard something of the treatment adopted in Malay families in cases of dangerous illness. In the household of a Perak Raja, *carte blanche* would be given to any one representing himself to have a remedy, on the occasion of a desperate sickness such as that which called for the scenes which I have imperfectly described. Any medicine offered would be gratefully received and administered, and very likely, before it could possibly take effect, some one else's prescription would be poured down the patient's throat on the top of it. It is thought to be a mark of sympathy and solicitude to suggest and prepare remedies, and they are usually accepted and tried in turn, to the imminent danger, I should imagine, of the unfortunate person experimented on. When a child is born in a royal house in Perak, all the old ladies in the country concoct and send to the scene of the interesting event doses called *salusuh*, which the mother has to swallow with great impartiality. It will be seen from this what an important part unprofessional zeal may play in sick chambers among the Malays. On the occasion I speak of, numbers of friends and relations brought their own specifics, but the state of the patient prevented their use.* I must, however, describe the dedication of a *balei berpusing*, or "revolving hall," which was arranged and carried out at the instance of one of the relations.

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* It is right that I should explain that every effort had been made to persuade the family to adopt civilised remedies, and to give up the proposed resort to the *pawangs*. There was no English Doctor in Perak then, but the officers at the Residency had a medicine-chest and one or two simple medical works. The head of the family, however, declared that, if the *pawangs* were not employed and the girl died, her other relations would charge him with not having done all in his power to save her. English medicines would be thankfully received, but they would be administered in their turn with native remedies. The sex of the patient rendered interference in nursing and feeding her impossible. A large proportion of persons who die up-country in Perak are ushered out of the world by the drum and chant of the *pawang* and *bidu*.

It was after the Sungkei demons had been invoked in vain that propitiatory offerings in a *balei berpusing* were resorted to.

The two *pawangs* already present were asked to give their aid, their mats were spread afresh, their lamps re-trimmed, and their bowls of parched rice replenished by officious attendants. Presently, a couple of men brought in a neat model of a Perak mosque. The house of prayer in an inland Malay village is a very simple affair. It is usually a square building with a door or window on each of the four sides. The main roof of the edifice, instead of terminating in a point, is surmounted by a little square crow's nest with a peaked roof. This was exactly reproduced in white wood very neatly and artistically finished. At the bottom of the miniature building was a single bamboo support, the end of which being hollow fitted like a socket upon an upright rod fixed on the floor. The one leg of the model being thus fitted on to a stationary upright, the little house could be turned round and round at will, presenting each door in turn to each point of the compass. As soon as it was fixed, a kind of frill or border, made of young cocoanut leaves with a deep fringe of the same material, was tied round the base of the model so that the ends hung down, entirely concealing the bamboo leg and the simple mechanism by which it worked upon its pivot. This fringe is called *jari lipan* ore "centipede's legs" from some fancied resemblance to the liberal numbers of members with which Nature has gifted that insect. When this had been tied round the miniature mosque and the ends of the fringe had been docked with a pair of scissors by a female slave, so as to admit of the model revolving freely, it was time to fill the interior with the propitiatory sacrifices. This was the task of the nearest relations and of the representatives of the old lady, in accordance with whose vow the *balei berpusing* was being dedicated.

The offerings to demons when made in this manner are of four kinds—*lemak*, *manis*, *masam*, *pedas* (the fat, the sweet, the sour, the pungent). The "fat" consisted of a fowl sacrificed then and there before us. The blood was caught in a leaf and placed in the centre of the miniature building, or *balei*, as I shall now call it. The feathers were plucked out, the entails removed, and tho body divided into joints. Every part of the bird was then placed reverently inside the *balei*, including the feathers and entrails. The wings were tied to the streamers of the fringe outside, as were innumerable sweet offerings—*wajil*, *dodul*, *tebu*, *pisang* (confectionery, pastry, sugar-cane and plantains). I did not ascertain what the sour and the pungent consisted of, but they were no doubt contained in small saucers and other receptacles which I saw being poked through the little doors of the toy house.

When all was ready, the drumming, the invocations and the performances of the *pawangs* began again. Each in turn, after having repeated much of what I have already described, advanced to the couch of the patient and waved the evil spirits away from it into the little *balei*, which was placed close by. The demons were coaxed, entreated and threatened by turns. Each *pawang*, armed with a bunch of leaves dipped into a bowl of *tepong tawar*, guided an indefinite number of the evil ones into the place where the feast had been spread for them. The incantations and waving went on for a long time, and it wanted only an hour or two of dawn when it was concluded that the last of the demons had entered the receptacle. The *balei* was then lifted up and carried off down to the river (on the bank of which the house stood) escorted by the *pawangs*, who with more charms and incantations drove the spirits in front of them to the water side. Then the *balei berpusing*, with its array of delicacies and its freight of wickedness, was set afloat on the river and soon disappeared down the stream in the darkness. The last ceremony was the repetition of a formula as the party returned to the house from the river. One of the men belonging to the family called out to the women in the house "*Semboh betah?*" "Is there any improvement?" And a shrill female voice shouted back the prescribed reply "*Ber-lari ber-jalan*" "Running and walking," in allusion either to the state of the patient, implying that she was up and about again, or else to the hasty retreat of the evil-spirits, I am not quite sure which.

No improvement, however, took place, and though the efforts of the *pawangs* were redoubled on the following night, and the services of other and more famous medicine-men were retained, the poor little patient never recovered consciousness and died within four and twenty hours after the *balei berpusing*, which ought to have contained all the powers of evil lately afflicting her, had been cast adrift on the Perak river.

W. E. MAXWELL.

NOTES
ILLUSTRATING THE CHANGES
WHICH
CONSONANTS UNDERGO IN PASSING
FROM ONE
MALAYAN DIALECT TO ANOTHER.

As one of the principal objects of the Straits Branch of the Royal Asiatic Society is to trace the origin of the various dialects of the Malayan Peninsula and Archipelago, I have thought that the following notes, though hastily put together, and with very little material to work upon, may prove interesting and give a clue to those who are more capable of following the tangled thread of Malayan etymology to its source than I am.

I have taken the Malay language as the starting point whenever possible: where three or four examples of a change are given, it must be understood that thirty or forty could as easily have been supplied: but a change exemplified by only one word must be considered doubtful until corroborated, as I hope each one will be, by further contributions from some of the large number of polyglotts whom the Straits Branch of the Royal Asiatic Society counts among its members.*

A. M. FERGUSON, Jnr.

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* [See CRAWFURD'S paper on the Malayan and Polynesian Languages and Races. Journ. Ind. Arch., II., 183.

ED.]

B changes into

G	*b*awa—carried.	*g*awa—Java.	
	*b*ara—live coals.	*g*ara—Battak.	
	*b*elatik—sparrow.	*g*alatik—Java.	
H	*b*isik—whisper.	*h*osik—Battak.	
	*b*usu—bow—Amblaw.	*h*usu—Saparna.	
	*b*ulu—feather.	*h*ulue—Awaiya.	
	*b*ueti—box—Lariki.	*h*ueti—Teluti.	
L	*b*intang—star.	*l*intang—Java.	
	ri*b*u—thousand.	ri*l*au—Champa.	
M	*b*uni—wise.	*m*uni—Battak.	
	*b*idan—black—Sasak.	*m*itang—Solor.	
	*b*laha—rat—Bouton.	*m*alaha—Awaiya.	
	*b*anyu—water—Java.	*m*anu—Bouton.	
	*b*oti—rat—Cajeli.	*m*uti—Tidore.	
R	*b*awa—under.	*r*awa—Macassar.	
	*b*anyu—water—Java.	*r*ano—Tomohon.	
	*b*iru—blue.	*r*uru—Tidore.	
T	*b*ungkus—packet.	*t*ongkos—Tagala.	
	*b*ulaley—elephant's trunk.	*t*ulale—Sunda.	*t*elale—Java.
	*b*uah—fruit.	*t*uah—Dusun.	
N	*b*ahas—rice—Sibuyan.	*n*ahas—Lara.	
	la*b*oh—rat—Kiyan Dyak.	la*n*au—Melano Dyak.	
W	*b*atu—stone.	*w*atu—Java.	
	*b*atuk—cough.	*w*atuk—Java.	
	*b*atang—trunk.	*w*atang—Bugis.	
	ba*b*i—pig.	ba*w*i—Macassar.	
D	*b*osan—loathsome.	*d*usan—Madura.	
	*b*anyu—water—Java.	*d*anum—Punan Dyak.	

D changes into

R	i*d*ong—nose.	i*r*ong—Java.
	*d*ara—blood.	*r*ara—Salayer.
	ma*d*u—polygamy.	ma*r*u—Java.
L	li*d*ah—tongue.	li*l*ah—Tomohon.
	*d*ara—blood.	*l*ara—Matabello.

D changes into

L	*d*uhy—bone—Menado.	*l*uin—Ahtiago.
	*d*owa—day—Wayapo.	*l*au—Baju.
	*d*aun—leaf.	*l*aun—Saparna.
	*d*ari—knife—Tidore.	*l*ari—Salibabo.
G	*d*umahi—come—Sanguir.	*g*umahi—Massaratty.
	*d*awika—day—Sula Islands.	*g*awak—Cajeli.
	*d*ayung—oar.	*g*ayung—Tagala.

H changes into

L	bo*h*ong—lie.	bo*l*aan—Tagala.
	*h*abu—ashes.	*l*avu—Amblaw.

G changes into

L	ti*g*a—three	ti*l*an—Melano Dyak.
	i*g*ung—nose—Battak.	i*l*ong—Sulu.

L changes into

D	*l*abuh—fallen.	*d*abu—Battak.
	*l*iar—savage.	*d*ia—Malagasi.
	*l*ima—five.	*d*imi—Malagasi.
	*l*inta—leech.	*d*inta—Malagasi.
	pi*l*i—choose.	fi*d*i—Malagasi.
N	*l*iyat—soft.	*n*iyat—Battak.
	*l*ima—arm—Samoa.	*n*ima—Tongan.
	ma*l*ur—jasmine.	me*n*ur—Java.
	la*l*at—fly.	la*n*ok—Battak.
	apu*l*a—dog—Gorontalo.	kapu*n*a—Sanguir.
P	*l*angir—sort of bark.	*p*angir—Battak.
	*l*empeng—roll of tobacco.	*p*empeng—Macassar.
B	*l*aut—sea.	*b*awut—Land Dyak.
R	*l*angit—sky.	*r*angi—New Zealand.
	*l*ayar—sail.	*r*ayar—Battak.
	*l*apar—hunger.	*r*apar—Battak.
	ui*l*a—lightning—Samoa.	ui*r*a—New Zealand.
W	bu*l*an—moon.	bo*w*an—Tagala.
	bu*l*ir—ear of corn. bo*l*ig—Bisaya.	bo*w*ig—Tagala.

L changes into

T	*l*abu—gourd	*t*abu-*t*abu—Battak. *t*awu—Malagasi.
J	*l*angkap—ready.	*j*angkep—Sunda.
Gh	u*l*u—head. o*l*o—Tagala.	o*gh*o—Bashi.
	tu*l*an—bone.	tu*gh*an—Bashi.
	bu*l*an—moon.	bu*gh*an—Bashi.

M changes into

T	*m*oa—fowl.	*t*oa—Espiritu Santo.
	*m*asina—salt—Malagasi.	*t*asi—Saparna.
B	*m*ata—eye	*b*akka—Enganho.
	*m*uwat—full.	*b*uwat—Dyak.
	*m*erah—red.	*b*ire—Sarawak.
P	*m*akan—eaten.	*p*akan—Javanese.
	*m*ati—dead.	*p*ati—Java. *p*atay—Tagala.
	*m*asuk—enter.	*p*asok—Tagala.
	*m*inta—beg.	*p*inta—Java.
H	*m*abuk—drunk.	*h*obog—Bisaya.
K	*m*ase—merciful—Lara.	*k*aseh—Sibuyan.
G	li*m*a—hand.	li*g*a—Fiji.
	*m*asina—salt—Malagasi.	*g*asi—Sula Islands.

N changes into

M	*n*ipis—thin.	*m*ipis—Sea Dyak.
	ma*n*uk—bird.	ma*m*uk—Bisaya.
D	*n*ipis—thin.	*d*ipis—Milanau.
	*n*asi—sea—Nias Islands.	*d*ahi—Samoe.
S	*n*iap—fowl—Kayan.	*s*iap—Pakatan.
	pa*nas*—hot.	pa*sso*—Sulus.
L	ma*n*ok—bird—Javanese.	ma*l*ok—Wahai.
	o*n*omo—six—Menado.	o*l*omo—Gorontalo.
	*n*uri—parrot.	*l*ori—Gebe.

K changes into

T	bu*k*a—open.	u*t*ah—Pakatan.
	*k*ras—hard.	*t*eras—Salayer.
B	*k*utu—louse.	*b*utoh—Kayan.

P changes into

M	*p*utih—white.	*m*uty—Teto.	
	*p*anas—hot.	*m*anah—Kisa.	
F	*p*utih—white.	*f*ula—Rotti.	
	a*p*i—fire.	a*f*u—Amblaw.	e*f*i—Matabello.
	*p*anah—bow.	*f*un—Teor.	*f*ean—Mysol.
	*p*uti—box.	*f*ud—Teor.	
	*p*ili—choose.	*f*idi—Malagasi.	
Ch	*p*anchang—palisade.	*ch*anchang—Java.	
	*p*andak—short.	*ch*andak—Java.	
	sa*p*ang—sandalwood.	sa*ch*ang—Java.	
H	a*p*i—fire.	a*h*u—Cajeli	ha*h*i—Teto.
	*p*uti—box.	*h*ueti—Teluti.	
W	*p*utih—white.	*w*ulan—Gani.	
G	*p*aluh—sweat.	*g*alo—Madura.	
K	ata*p*—thatch.	ato*k*—Bugis.	
	*p*isau—knife.	*k*isu—Malagasi.	
N	*p*ulu—ten.	*n*ulu—Timuri.	

R changes into

D	*r*aut—polished.	*d*au—Dyak.
	*r*atus—hundred.	*d*atus—Baju.
	bi*r*u—blue.	ma-bi*d*u—Menado.
Dl	ba*r*is—line.	ba*dl*is—Bisaya.
	a*r*ao—day—Tagala.	a*dl*au—Iloco.
G	ba*r*a—live coals.	ba*g*a—Tagala.
	baha*r*u—new. ba*r*u—Sunda.	} ba*g*o—Tagala.
	be*r*kas—faggot.	bo*g*kos—Bisaya.
	be*r*at—heavy.	bi*g*at—Tagala.
	be*r*as—rice.	bi*g*as—Tagala.
	*r*atus—hundred.	*g*atos—Tagala.
	*r*usuk—side.	*g*osok—Bisaya.
	*r*ebah—fallen.	*g*iba—Tagala.
	*r*anggang—open.	*g*anggang—Bisaya.
	a*r*ao—day—Tagala.	a*g*gao—Cayag.

R changes into

H	be*r*as—rice.	be*h*as—Dyak.
	*r*otan—rattan.	*h*otang—Battak.
L	ba*r*ang—thing.	ba*l*ang—Tagala.
	*r*achun—poison.	*l*asou—Tagala.
	*r*ibu—thousand.	*l*ibu—Tagala.
	*r*echik—scatter.	*l*isay—Bisaya.
	*r*ebung—a shoot.	*l*abong—Bisaya.
S	*r*ibu—thousand.	*s*abu—Macassar and Bugis.
	u*r*an—rain—Iranun.	u*s*an—Punan Dyak.
T	ba*r*ang—thing.	bo*t*ang—Bisaya.
W	ba*r*a—live coals.	wa*w*a—Java.
	*r*echik—scatter.	*w*isik—Tagala.
N	pu*r*ok—short—Sarawak.	pu*n*ok—Lara.
	*r*atus—hundred.	*n*atun—Rotti.

S changes into

D	bu*s*a—foam.	bu*d*ah—Sunda.
R	bu*s*a—foam.	bu*r*a—Battak.
L	bu*s*a—foam.	bu*l*a—Tagala.
	*s*imo—man—Orang Utan of Johor.	*l*imo—Orang Utan of Johor.
T	pi*s*au—knife.	pi*t*o—Gorontalo.
	*s*io—nine—Tidore.	o*t*io—Gorontalo.
	*s*ulak—bald.	*t*ula—Tonga.
	ta*s*ik—sea.	ta*t*i—Caroline.

T changes into

K	*t*aro yam—Fate.	*k*alo—Ilea.
	*t*oa fowl—Fate.	*k*ua—Solomon Islands.
	fa*t*a-fa*t*a—breast—Samoa.	va*k*ava*k*a—Fiji.
	ma*t*a—eye.	ma*k*an—Kissa.
	*t*alinga—ear.	*k*ilin—Kissa. *k*aleha—Enganho.
L	*t*angan—hand.	*l*ungan—Sibnow.
	pu*t*ih—white.	fu*l*a—Rotti.
S	ma*t*a—eye.	ma*s*o—Malagasi.
	pu*t*ih—white.	bu*s*—Mysol.

T changes into

S	*t*asi—sea—Ahtiago.	*s*asi—Menado.
	hu*t*a—ten—Teor.	hu*s*a—Wahai.
	*t*imah—tin.	*s*amah—Kayan Dyak.
N	*t*angis—weep.	*n*angis—Malan.
	*t*anuk—cook—Sarawak.	*n*anuk—Lara.
	*t*uhas—to open—Sadong.	*n*ukas—Lara.
	*t*ulis—write.	*n*ulis—Java.
B	u*t*an—forest.	u*b*an—Bulud Opie.
	u*t*ok—head—Bukutan Dyak.	u*b*ak—Land Dyak.
	*t*ulang—bone.	*b*along—Java.
P	*t*asik—sea—Balan Dyak.	*p*asik—Bukutan Dyak.
	*t*ijih—snake—Kinta Sakai.	*p*iji—Chendariang Sakai.
	*t*uan—lord.	*p*uang—Bugis.
H	*t*aluk—bay.	*h*olok—Kisa.

B omitted.

*b*ujur—length.	ujur—Java.
*b*unyi—noise.	uni—Java.
*b*asuh—washed.	asuh—Java.
*b*ook—hair—Tagbenua.	ook—Achin.
*b*ulat—round.	ulat—Java.
*b*ulan—moon.	ulan—Iranun.
*b*uka—open.	utah—Pakatan.

K omitted.

*k*aki—foot.	ahi—Iranun.
*k*ulit—skin.	uli—Bugis.
*k*aju—wood—Bukutan Dyak.	aju—Samoe.
*k*aluk—embrace.	aluk—Battak.
*k*asih—affection.	asi—Battak.
*k*ikis—efface.	ikis—Dyak.
*k*ibar—float.	iber—fly—Java.

L omitted.

*l*amun—if.	amun—Dyak.

L omitted.

*l*utut—knee.	utut—Dyak.
*l*esung—mortar.	asung—Macassar.
*l*a—day—Kanaka.	a—Marquesas.
*l*alang—sort of grass.	alang—Java.
*l*aki—man.	aki—Iranun.
*l*ibok—hair—Land Dyak.	ibok—Punan Dyak.
*l*oma—heart—Fiji.	uma—Sula Islands.

M omitted.

*m*ana—where.	ano—Tagala.
*m*anis—sweet.	anis—Dyak.
*m*inum—drink.	inum—Java.
*m*uda—young.	uda—Battak young brother of father.
*m*uri—return.	ure—Lara.
*m*atinro—sleep—Bugis.	atinro—Macassar.
*m*untah—vomit.	utah—Java.
*m*impi—dream.	impi—Java.
*m*ampelam—mango.	ampelan—Sunda.
*m*inyak—oil.	inyo—Sarawak.
*m*unam—sick.	unam—Lara.

D omitted.

*d*anum—water—Malan.	anum—Milanau.

N omitted.

*n*irong—nose—Iranun.	irong—Bulud Opie.
*n*ipa—tooth—Iranun.	ipun—Sulus.
*n*asu—dog—Nias Island.	asu—Iranun.
*n*anti—wait.	anti—Java.
*n*uran—rain—Tonsea.	uran—Rembokeng.
*n*ubu—deep—Fiji.	obou—Aneiteum.

R omitted.

*r*atus—hundred.	atus—Java.
*r*ibu—thousand.	iwu—Java.

R omitted.

*r*umah—house.	uma—Java.
*r*usuk—side.	usuk—Java.
*r*ebung—a shoot.	ebung—Java.
*r*usa—deer.	usa—Sulu.
*r*ima—hand—Bima.	ima—Sasak.

S omitted.

*s*ilau—nail—Melano Dyak.	ilu—Panun Dyak.
*s*aloi—boat—Melano Dyak.	aloi—Bukutan Dyak.
*s*umpit—blowpipe—Iranun.	umput—Kian Dyak.
*s*isit—small—Melano Dyak.	isi—Bukutan Dyak.
*s*irut—drink—Melano Dyak.	irup—Balan Dyak.
*s*aro—come—Bulud Opie.	aran—Balan Dyak.
*s*aiah—eight—Kian Dyak.	aian—Melano Dyak.
*s*umu—high—Ladong.	omu—Sarawak.
*s*ungei—river.	ungah—Kian Dyak.
*s*ak—ripe—Kian Dyak.	ak—Pakatan Dyak.
*s*ela—stone—Java.	ilah—Timbora.
*s*ingut—bee—Pakatan Dyak.	ingat—Kian Dyak.

T omitted.

*t*ulun—man—Dusun.	ulun—Bulud Opie.
*t*unjuk—finger—Balan Dyak.	unjok—Malan.
*t*ulu—head—Dusun.	ulu—Bulud Opie.
*t*ulan—moon.	ulan—Iranun.
*t*adan—day.	alan—Bukutan Dyak.
*t*apoi—fire.	apoi—Bulud Opie.
*t*inggi—high.	inggil—Java.
*t*enang—calm.	enang—Java.
*t*endas—head—Sunda.	endas—Java.
*t*angan—hand.	angan—Salakan.
*t*uta—head—Bima.	uta—Ceram.
*t*asik—sea.	asih—Patos.

METATHESIS.*

rusa—deer.	ursa—Battak.
pateri—borax.	parti—Battak.
makan—eat.	kuman—Dyak.
ular—snake.	ural—Sea Dyak.
mose—star—Erromango North.	umse—Espiritu Santo.
tuboh—body.	mbutuh—Nias Islands.
semut—ant.	sitom—Bulud Opie.
tikus—art	sikut—Bulud Opie.
timah—tin..	mital—Bulud Opie.
utan—jungle.	tuan—Kian Dyak.
kilat—lightning.	latiga—Samoe.
besok—to-morrow.	suwog—Dusun.
ikan—fish.	kina—Sanguir.
talinga—ear.	tangina—Sida.
dara—blood.	ratta—Yap.
liva—lightning—Fiji.	uila.
unuma—drink—Fiji.	umni—Aneiteum.
lidah—tongue.	dilah—Sulu.
mano—bird—Lariki.	namo—Galela.
manu—water—Bouton.	namo—Ternate.
dikit—small—Batchian.	kedi—Salayer.
naraka—hell.	ranaka—Bugis.

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* [Instances of metathesis are common enough in the Malay language itself. The following are examples:—

beting—a sand or mud-bank.	*tebing*—bank, edge.
hampas—refuse Cf. *hampa* empty.)	*sampah*—rubbish, dirt.
tara—flat, level.	*rata*—flat, level.
tebal—thick.	*lebat*—thick, heavy, (of rain or a crop of fruit).
olok—to mock, deride, pretend.	*lawak*—to say or do a thing in fun or sport.

lemukut and *melukut*—broken grains of rice.
rakit and *arkit*—a raft.
saluar and *sarual*—trousers.
ralau and *arlau*—a smelting furnace.

ED.]

PREFIXES.

putih—white.	ma-pute—Bugis.
lotong—black—Sembawa.	ma-lotong—Bugis.
tindu—sleep—Sasak.	ma-tinro—Bugis.
itam—black.	ma-itum—Sanguir Island.
biru—blue.	ma-bidu—Menado.
anak—child.	ini-anak—Ahtiago.
muti—cold—Batumerah.	da-moti—Wayapo.
mai—come—Sula Island.	du-mahi—Sanguir. gu-mahi—Massaratty
telo—egg—Wayapo.	me-telo—Sula Island. un-tello—Baju.
tolo—egg—Mysol.	on-tólo—Bouton.
baba—father—Java.	ni-baba—Sula Island. nam-baba—Galela.
ama—father—Salayer.	na-ama—Massaratty.
bapa—father—Gani.	ko-papa—Batumerah.
panas—hot.	um-pana—Amblaw. mo-fanas—Goh.
pito—knife—Gorontalo.	ko-bit—Gani.
tin—mat—Mysol.	ka-tini—Massaratty.
laut—sea.	be-lot—Mysol.
polo—soft—Morella.	um-blo—Mysol.
bulan—moon.	ram-bulan—Java vulgar.
yu—shark.	kluyu—Java.
metan—black—Ke Island.	mul-metan—Mysol.

DECAPITATION.

ram-but—hair.	buk—Bulud Opie.
ka-pala—head.	pala-ulau—Melano Dyak.
am-pat—four.	pat—Iranun.
ki-chil—small.	chili—Java.
ta-linga—ear.	linga—Milanau.
mi-nyak—oil.	nyauk—Melano Dyak.
bi-tuin—star—Sanguir.	toin—Matabello.

Decapitation.

be-tol—star—Gani.	tulu—Wayapo.
du-ri—thorn.	ri—Java.
ja-latang—rattle.	latang—Java.
de-lapan—eight.	lapan—Semang of Ijoh.
sem-bilan—nine.	pitan—Kian Dyak.
ma-kan—eat.	kaun—Tagbenua.
be-sok—to-morrow.	suwog—Dusun.
pi-sang—plantain.	sain—Sulu.
tu-juh—seven.	ju—Land Dyak.

Contraction.

darah—blood.	dah—Punan Dyak.
tulun—man—Dusun.	ton—Iranun.
kaki—foot.	aai—Tagbenua.
tulu—head—Dusun.	ulu—Bulud Opie. O—Sulu.
bulu—hair.	mbu—Nias Island.
ikan—fish.	ka—Perak Semang.
bras—rice.	bah—Punan Dyak.
minyak—oil.	inyo—Sarawak.
sumpitan—blow-pipe.	upit—Bukutan Dyak.
bulud—mountain—Bulud Opie.	bud—Sulus.
sungei—river.	aung—Perak Semang.
tanah—land.	teh—Perak Semang.
ayer—water.	ai—Balan Dyak.
hitam—black.	ita—Nias Island.
makan—eat.	man—Land Dyak.
tarum—indigo—Sunda.	tom—Java.
jarum—needle.	dagum—Bisayan. dom—Java.
sumut—ant.	umu—Liang.
polutu—boat—Wahai.	lotu—Sula Island. oti—Tidore.
manis—sweet.	mis—Mysol.
tasok—sea—Gah.	tak—Erromango North.
taruh—wager.	toh—Java.

STRAITS METEOROLOGY.

IN the Annual Summary for 1882, the Officer who is responsible for our Meteorological Statistics stated, truly enough, that "an exhaustive report on the Meteorology "of these Settlements cannot yet be attempted, as the "subject is still in its infancy here." But it does not seem too early to endeavour to obtain some results from the series of Rainfall Returns (1869-83) which the Colonial Government commenced to keep in Singapore soon after the Transfer, and which are now taken with increasing care at nearly twenty stations, situated at intervals along the whole West Coast of the Peninsula. A wider range of observations is also now available in the comparative Tables compiled by the Director of the Batavia Observatory from 166 stations in the Eastern Archipelago, the fourth volume of which (for 1882) has just been received.

The year 1882-3 has been one of peculiar interest to meteorologists. It was both a "sun-spot" year and a "cholera" year, the respective 11-year and 17-year periods happening to correspond. Nor have the theorists been disappointed.

It becomes of interest, therefore, to examine our local Returns with special attention, incomplete though they undoubtedly are for any large generalisations.

In the first place, what are these theories respecting the periodicity of solar and magnetic phenomena and all that is supposed to be connected with them? The last published volume of the new edition of the "Encyclopædia Britannica" (vol. XVI of 1883) explains them, on the highest authority, as follows :—

"105. *Rainfall—Heights of Rivers and Lakes.*—In 1872 MELDRUM of the Mauritius Observatory brought forward evidence showing that the rainfalls at Mauritius, Adelaide, and Brisbane were, on the whole, greater in years of maximum than in years of minimum sun-spots. Shortly afterwards it was shown by LOCKYER (*Nature*, December 12, 1872) that the same law was observable in the rainfalls at the Cape of Good Hope and Madras.

" MELDRUM has since found that the law holds for a great number of stations, including eighteen out of twenty-two European observatories, with an average of thirty years' observations for each. The results are exhibited in the following table:—

[Here follows a list of 22 cities with observations for an average of 30 years, shewing in 18 cities *excess* and in 4 cities *defect* of rain in the periodical " sun-spot" years.]

" It would, however, appear from the observations of Governor RAWSON that the rainfall in Barbados forms an exception to this rule, being greatest about the times of minimum sun-spots.

" 106. GUSTAV WEX in 1873[1] showed that the recorded depth of water in the rivers Elbe, Rhine, Oder, Danube and Vistula for the six sun-spot periods from 1800 to 1867 was greater at times of maximum than at times of minimum sun-spot frequency. These conclusions have since been confirmed by Professor FRITZ. [2]

"Quite recently STEWART (*Proc. Lit. and Phil. Soc. of Manchester*, 1882) has treated the evidence given by FRITZ as regards the Elbe and Seine in the following manner. He divides each sun period, without regard to its exact length, into twelve portions, and puts together the recorded river heights corresponding in time to similar portions of consecutive sun periods. He finds by this means residual differences from the average representing the same law, whether we take the whole or either half of all the recorded observations, and whether we take the Elbe or the Seine. The law, is that there is a maximum of river height about the time of maximum sun-spots and another subsidiary minimum about the time of minimum sun-spots. There is some reason too to think that the Nile and Thames agree with those rivers in exhibiting a maximum about the time of maximum sun-spots and a subsidiary maximum about the time of minimum sun-spots, only their subsidiary maximum is greater than it is for the Elbe and Seine.

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[1] *Engenieur Zeitschrift*, 1873.

[2] *Ueber die Beziebungen der Sonnenflecken Periode zu den Magnetischen und Meteorologischen Erscheinungen der Erde*, Haarlem, 1878.

"107. In 1874 G. M. Dawson came to the conclusion that the levels of the great American lakes were highest about times of maximum sun-spots. In this investigation the value of the evidence derived from rivers and lakes is no doubt greater than that derived from any single rainfall station, inasmuch as in the former case the rainfall of a large district is integrated and irregularities due to local influence thus greatly avoided.

"108. Dr. Hunter, director-general of statistics in India, has recently shown (*Nineteenth Century*, November 1877) that the recorded famines have been most frequent at Madras about the years of minimum sun-spots—years likewise associated with a diminished rainfall.

"109. *Winds and Storms.*—Meldrum of the Mauritius Observatory found in 1872, as the result of about thirty years' observations, that there are more cyclones in the Indian Ocean during years of maximum than during years of minimum sun-spots.[1] The connexion between the two is exhibited in the following table":—

[Here follows a comparison of the Cyclones and Sun-spots during the years 1847-73. The maximum number of Cyclones in any one year is 15, the minimum 4, and the steady *ups* and *downs* of the periodic fluctuations are very remarkable. The following are the years of maximum and minimum Cyclones:—

1847,	5	Cyclones
1849,	10	,,
1854,	4	,,
1859,	15	,,
1864,	5	,,
1869-71,	11	,, per annum.

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[1] *Br. Assoc. Reports, 1872.*

The course of the periodic wave in this table and in the one below exhibiting the Straits rainfall, closely correspond.]

"In 1873 M. Poëy found a similar connexion between the hurricanes of the West Indies and the years of maximum sun-spots. He enumerated three hundred and fifty-seven hurricanes between 1750 and 1873, and stated that out of twelve *maxima*, ten agreed.

"110. In 1877 Mr. Henry Jeula, of Lloyd's, and Dr. Hunter found that the casualties of the registered vessels of the United Kingdom were 17½ per cent. greater during the two years about maximum than during the two years about minimum in the solar cycle.

"111. *Temperature.*—Baxendell, in a memoir already quoted, was the first to conclude that the distribution of temperature under different winds, like that of barometric pressure, is sensibly influenced by the changes which take place in solar activity. In 1870 Piazzi Smyth published the results of an important series of observations made from 1837 to 1869 with thermometers sunk in the rock at the Royal Observatory, Edinburgh. He concluded from these that a heat wave occurs about every eleven years, its maximum being not far from the minimum of the sun-spot cycle. Sir G. B. Airy has obtained similar results from the Greenwich observations. In 1781 E. J. Stone examined the temperature observations recorded during thirty years at the Cape of Good Hope, and came to the conclusion that the same cause which leads to an excess of mean annual temperature at the Cape leads equally to a dissipation of sun-spots. Dr. W. Köppen in 1873 discussed at great length the connexion between sun-spots and terrestrial temperature and found that in the tropics the maximum temperature occurs fully a year before the minimum of sun-spots, while in the zones beyond the tropics it occurs two years after the minimum. The regularity and magnitude of the temperature wave are most strongly marked in the tropics."

It has been thought best to give the whole of this well-digested summary, as it presents, under the authoritative initials of "B. S.," the latest information upon the whole question, from an impartial standpoint. The mere reference here made to Dr. HUNTER and others is, however, so brief as to suggest but a fractional part of what has already been done to establish as a fact the recurrence of "the sun-spot and famine period," especially in India.

Since the article in the Encyclopædia, from which I have quoted, was written, the outbreak of Cholera in Egypt last autumn has drawn special attention to the periodicity of that mysterious disease. An account of its recurrence in this century was published in the *Times* last July, without any reference to any question of periodicity, but it was impossible to overlook the similarity of the intervals marked by the dates there given :—

* 1832, 1849, 1866, 1883.

The connection between Meteorology and periodical epidemics forces itself into special notice in this Colony, with regard not only to Cholera, but to another mysterious and fatal disease—"Beri-Beri"—which is a far greater local scourge.

The following extracts from recent official reports regarding outbreaks of each disease will sufficiently show the claim which this matter has on our attention :—

"*Amount of Rain during Cholera Epidemic.*

"109. From the Return attached *(G)* it will be seen that the total rainfall for the year was 66.19 inches, about 30 inches below the average, I believe. During the months when the Cholera prevailed the rainfall was as under :—

1882.			*Inches.*
March,	...	...	2.57
April,	...	...	4.40
May,	...	...	2.36
June,	...	...	3.73
July,	...	...	2.92

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* This was the first appearance of Cholera in Europe, but it will be remembered that it was in 1798 [1832 *less* (17 × 2)] that occurred the historical outbreak in Egypt by which BONAPARTE'S movements were so hampered.

so that in those five months the rainfall was rather less than a quarter of that which fell in the year."[*] [Malacca Administration Report, 1882.]

The facts as regards "Beri-Beri" relate to the recent outbreaks in the Singapore Prison, and are shown in an official report as follows:—

"Amount of Rain and number of Beri-Beri Cases:—

	Numbers.	Deaths from Beri-Beri.	Rainfall.
1877, ...	814	22	61 inches.
1878, ...	845	65	99 ,,
1879, ...	777	106	118 ,,
1880, ...	626	87	102 ,,
1881, ...	642	35	92 ,,
1882, ...	806	50	79 ,,
1883, ...	837	27	66 ,, "

As regards another local disease, "Country Fever," the following authoritative statement on this subject is to be found in the new Encyclopœdia's article "*Malaria*":—

"The epidemic prevalence of intermittent and remittent fever in certain years probably finds its explanation in the meteorology of those years, but no uniform law has been discovered."

A subject of more general interest, and one which has already excited some discussion in the Straits, has reference to the effects on rainfall of disafforesting a country. Some say that the loss of our timber has diminished the supply of rain; others deny it, and

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[*] The Cholera which visited this Colony at the very commencement of the long drought 1882-3 seems to have followed the course of defective rainfall in the various Settlements with remarkable precision—and as the disease appeared rather before than after the rainfall phenomena of the period had declared themselves, the influence must, it seems, have been less hygrometric than magnetic in its origin. The following are the facts:—

In Malacca,	65 inches	in 1882,	... The epidemic was worst.
In Singapore,	88 ,,	,,	The epidemic was less felt.
In Prov. Wellesley,	92 ,,	,,	
In Penang,	126 ,,	,,	... There was not a single case.

The *average* rainfall is much the same in all the Settlements.

point to the Rainfall Returns as conclusive. Of this difference of opinion, an example was afforded in the apparently contradictory views published in the Forest Report, 1883, paragraph 25 and Appendix *E*.

In 1880, Mr. WHEATLEY, in his most useful paper on our Rainfall in Journal No. VII, was careful to express no definite opinion; though the necessities of his argument about "the one great influence at work—the monsoons" required him to attach little weight to any local cause.

The enquiry into the degree and mode of this "monsoon" influence has, since he wrote, been much facilitated by the extension of the Dutch observations in Netherlands India, to which I have referred above. The Director, Dr. VAN DER STOK has kindly sent me his Records of Rainfall, in which he is now able to give the mean for four years in 166 stations throughout this great region. The following summary of the 20 principal places, named in geographical order, to the North and South of the Equator respectively, has been compiled from these Dutch Returns; and they show how closely the degree of excess or defect of rain in 1882 followed the degree of North or South in the observing station. The fact of excess or defect is, it will be seen, entirely governed (except in the case of three headlands) by the question whether a place lies North or South of the Equator, which is in this matter presumably equivalent to "monsoon" influence.

TABLE OF NETHERLANDS INDIA STATIONS.

Comparing the Rainfall in 1882 *with the Mean Annual Amount.*
(*in millimetres.*)

[The places in brackets are headlands exceptionally situated, which differ from neighbouring places less exposed. It is noticeable also that while the rest of the Straits followed the law here observed and had deficient rain, Penang, which belongs rather to further India than Malaya, had a marked excess.

The places in italics lie South of the Equator.]

		Average of 4 years M. M.	Rainfall 1882. M. M.
(Acheen)	...	1,769	1,806
Deli	...	2,233	1,840
Rio	...	2,623	2,430
Jambi	...	2,484	2,154
Palembang	...	3,075	3,147
(Anjer)	...	2,101	2,034
Batavia	...	2,012	2,460
Sourabaya	...	1,854	2,856
(Banjoewangi)	...	1,485	1,446
Tjilatjap	...	5,054	5,490
Bencoolen	...	3,173	3,209
Padang	...	4,640	4,673
Singkel	...	4,455	4,057
Celebes	Menado 2° N. ...	2,647	2,880
	Macassar 5° S. ...	3,562	4,203
Moluccas	Ternate 2° N. ...	2,402	2,326
	Banda 4° S. ...	3,118	3,488
Borneo	Pontianak (on the Equator)	3,090	3,096
	(*Banjermasin* 3° S).	2,519	2,609

Whether or not "monsoon" laws usually have such ruling influence, there can be little doubt that the effect of disafforestment on the annual rainfall, whatever it may be elsewhere, is at a minimum in the Straits. The difference of opinion on this point is, it may be surmised, partly due to some confusion between the mean annual rainfall and the periodical distribution of rain (as recorded in the numbers of days on which rain fell), and to a want of sufficient discrimination in the further matter of distribution, *viz.*, the loss or storage of the rain after falling, which is probably the most important point of all to agriculturists, though one with which meteorology is only indirectly concerned.

There can be no doubt that temperature, on the other hand, is closely affected, here as elsewhere, by the loss of forest and by the spread of buildings. The existence of Singapore now covers two generations; the experience of the first generation was summed up by Mr. Crawfurd in 1855 with the following statement (Descriptive Dictionary p. 396) :—

" *(a)* January is the wettest and coldest month of the year.

" *(b)* The average rainfall in "a series of years" is 92.69.

" *(c)* The mean temperature is 81.24 and the range from the " mean of the hottest month to that of the coldest is 2.76 only.

" *(d)* Comparing this with the temperature that was ascertained " in the infancy of the Settlement, it would appear that it has " increased (1855) by 2.48, a fact ascribable, no doubt, to the increase " of buildings, and to the country having been cleared of forests " for several miles inland from town, the site of the observations."

A similar summary could most usefully be prepared in 1885 for comparison and record.

The most interesting question of all for our meteorologists is that with which this paper commenced—the question whether we have here recurring periods of drought and rain, due to sun-spots or magnetic influence of some kind. If there is any such period due to solar influence, why, compared with that influence, even the "monsoon" shrinks into a "local" cause, and becomes of comparatively little importance. Mr. Wheatley did not like "to " hazard, even by guessing, a rule by which the rainfall of Singa- " pore can be calculated upon." But the Tables he published show that in fact the period of 10½ to 11 years, and the subsidiary period of about 5 years, are peculiarly well-marked in Singapore. Take his figures in Tables VII and VIII, for example: the total numbers of dry days for the 17 years 1864-80 are given for each month the annual totals being as follows :—

1864,	19	1870,	15	1876,	11
1865,	**12**	1871,	7	1877,	*11*
1866,	18	1872,	*13*	1878,	9
1867,	*23*	1873,	11	1879,	**7**
1868,	13	1874,	**9**	1880,	8
1869,	**9**	1875,	10		

The size of the type is intended to make the periodic fluctuation clearer. But the resources of typography do not permit the full regularity of the recurrence to be shown without a diagram, and careful attention is invited to the whole series of figures published in Journal No. VII.

It will be seen, for example, that the driest years in their respective periods are 1866-7 and 1876-7, and the least dry 1869 and 1879-80.

A comparison of the exceptionally dry months, January-March 1867, (35 dry days) with August-September 1877, (27 dry days) and of the exceptionally wet months, October-December 1869 (8 dry days) with March-May 1880 (9 dry days) marks the period as one of 10½ years still more precisely.

The same thing is shown by the Table II of Annual Rainfall there published; the table being brought up to date, the totals for each periodic year are as follows :—

wet years		inches		dry years	inches
1870	...	123.24	...	1872-3	91.01
1875	...	108.48	...	1877	61.19
1879-80	...	111.34	...	1882-3	73.33

The mean Annual Rainfall may be roughly taken at 100 inches.

[A diagram with a curved line, starting from the end of 1869 for the maximum rain, and from the middle of 1872 for the minimum rain, will be found to move up and down with an almost perfectly regular curve.]

It is certainly well to wait until we have a larger series of Annual Returns before generalising on such a matter too positively; and this branch of the subject is only touched upon now to invite the attention of all who may keep or study our Meteorological Records. But from the evidence already accumulated, the long drought of 1882-83, which ended last August, was, I maintain, clearly to be anticipated; for it closed the solar period dating from the limited rainfall (160 inches) in 1872-3, and the subsidiary dry period, showing the fall of 148 inches only, in 1876-7.

An excess of rain may, in the same way, be looked for in the years 1884-5, and still more in 1885-6 : but not so great an excess, these years merely closing the subsidiary period of excess from 1879-80 (228 inches). It was the year 1880 that closed the full periodic term dating from the phenomenal rainfall of the rainy term—August 1869 to December 1870—(173 inches).

By such calculations as these, predictions about the Rainfall may, I think, be hazarded even now, notwithstanding that we still have insufficient means of deciding the scientific laws that govern the subject.

A. M. SKINNER.

OCCASIONAL NOTE.

——:o:o:——

The *Journal Asiatique* for January, 1883, laid before the public a short article entitled *Quelques Notes de Lexicologie Malaise. Additions au Dictionaire Malais-Français de l'Abbé Favre, par M. Marcel Devic.* The notes which M. Devic offered as a contribution to a future supplement of Favre's Malay-French Dictionary include a meagre list of thirty words only, and these seem to have been collected during a perusal of the *Sajarah Malayu,* in the course of which the contributor discovered what seemed to him to be omissions in the dictionary.

M. Devic is known to us by a translation of the *Sajarah Malayu,* in which, however, the explanatory and critical notes are few and unimportant.

The dictionary of the Abbé Favre found a champion at once in M. Aristide Marre, who, in a paper which occupies twenty pages of *Le Muséon* (No. 2 of 1883), examined critically M. Devic's contribution. Each note is dealt with in turn, and if M. Marre is always right, M. Devic, with whom he seldom or ever agrees, must be almost invariably wrong. But the criticisms of the writer in *Le Muséon* seem to be often less happy than the suggestions of the contributor of the *Journal Asiatique.* The word *urdi,* which occurs in the *Sajarah Malayu,* has occasioned some discussion; M. Devic thinks those wrong who have derived it from the English word "order," and supposes that, when the chronicle describes Albuquerque as going to Europe for *urdi,* it is an *armada* that is meant. M. Marre points out that, besides "order" in English and Dutch, *urdi* may possibly be referable to *ordem, ordens,* in Portuguese. There is little to be said for M. Devic's emendation, but it is not necessary, on the other hand, to agree with M. Marre that *le mot "urdi" est Malais.* He will find it to be Hindustani quite as much, The Sepoy in British India calls his uniform *urdi*, *i. e.*, the dress which he has to wear *by regulation*.*

M. Marre is quite right when he tells M. Devic that *burong ular* and *burong kambing* do not mean *oiseau des serpents* and *oiseau des chèvres*, but *oiseau-serpent* and *oiseau-chèvre*. His correction of the proffered translation of *ber-budak* is equally sound. But why he finds M. Devic's translation of *niaris lepas deri tangan* to be *stupéfiante* is not so clear. The passage quoted evidently means that the prince narrowly escaped dying of his illness. Malay abounds with figurative expressions regarding death.

Neither of the disputants can suggest the real meaning of *kain manchong*. M, Devic says that *manchong* is equivalent to *panchong* and means a garment cut in a point. M. Marre gives *manchong* up, and proposes to read *ber-kain panjang*. The phrase is descriptive of a particular mode of wearing the *sarong*. *Ber-kain manchong* signifies to wear the *sarong* caught up short on the right side and long on the left with one end hanging down in front. It is considered a sign of ostentation. It is incorrect to confuse *manchong* with *munchong*, as M. Marre does. *Munchong* means the snout or muzzle of an animal, *e. g.*, of a pig or dog. If applied to the human nose, it means "protruding," not necessarily "aquiline." Favre and Klinkert have misunderstood a phrase in which the word occurs. (Malay Proverbs, Supra, p. 81, No. 269.)

I have not referred to the *Sajarah Malayu* to consult the text which the expression *limau mangkar* occurs. M. Devic does not find *mangkar* in Favre's dictionary, and suggests that it may be the name of a country. M. Marre rejects this idea, and prefers to regard the word as a description of a particular variety of *limau*. It would not need a great stretch of the imagination to suppose that, by a clerical error, *mangkar* might have been written for *mangkasar*, Macassar, and, if this is allowable, here is the name of a country at M. Devic's service. But *mangkar* (*cf. mangkal*) as applied to fruit, has a meaning of its own; *durian mangkar* is a *durian* which, though to all appearances ripe, is hard and uneatable inside. *Limau*

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* *Wardi* is found in Shakespear's Hindustani Dictionary and there said to be derived from the English and to mean "word, order."

mangkar may be equivalent to *limau mangkal*, a green lime just picked, but I do not know if this interpretation will agree with the context.

M. Devic would like to derive the Malay words *tuan* and *kiai* (a title), from the Persian, while M. Marre, with much reason, points out that a Malay dictionary would be hardly the place for suggestions of this sort. Why does M. Devic fix upon *tuan* (which he refers to the Persian *tuwanisten*, to be able; *tuvâna*, powerful; *tuwan*, force, power) and leave unnoticed the pronoun اين *ini*, this (Persian, اين *in*, this)?

It is not necessary to examine in detail the other words in the list, and the various remarks made about them by both writers. It may be pointed out, however, that the word بلت, which Favre writes *balit*, is really *bĕlit* (compare *lilit*). *Ber-jalan dua tiga bĕlit* signifies, as M. Devic states, "to take two or three turns in walking," but both he and M. Marre, by following Favre's spelling, give an incorrect idea of the pronunciation of the word.

Favre's Malay-French dictionary may, no doubt, be supplemented by hundreds of words, but they will be gathered probably from colloquial intercourse with Malays, and from books not consulted by the Reverend Abbé. The *Sajarah Malayu*, which is one of the authorities most often quoted by the Abbé Favre, was not likely to furnish M. Devic with much material for new lexicological notes of value.

W. E. M.

MISCELLANEOUS NOTES.

MALACCA IN THE EIGHTEENTH CENTURY.

[The following short paper is a translation from the old Dutch records in the Government Offices at Malacca, by the Government translator, which I have revised a little, and to which I have added a few explanatory notes, for some of which I am indebted to Mr. J. E. Westerhout.

D. F. A. H.]

Extract from the Diary of Malacca in the year 1756.

In the Fortress of Malacca, Anno 1756.
November, Monday, 1st.

Having some days ago received news here, that Râja Saïd of Sĕlângor, a relation of Daïng Kambôja, had joined the enemy at Klêwang* with all his forces, there was no longer any doubt but that we should hear of them before long.

Our suspicions were confirmed too soon.

The enemy, wishing to shew their heroic valour to their new allies, the pirates of Râja Saïd lately arrived from Sĕlângor, marched to Gevesteyn,† the country seat of the Hon'ble Thomas Schippers, Attorney-General of the Netherlands Indies, taking the road through the jungle round the Lazarus-house.* They had once before, some time since, attacked the same place, but had then been vigorously repulsed by the 15 Malay defenders of the house; who were well armed with muskets and a blunderbuss. On the occasion of this second attack, they placed combustibles at the doors and windows, and the smoke and fire produced by this stratagem compelled the Malays to surrender after a short resistance, when they were brought as prisoners to Klêwang.

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* This is the place now called Klêbang. It was originally called "Klêwang" owing to the murder of a Malay with an Achinese weapon of that name; so the story goes. But probably the original name was really "Klêbang," the name of a tree, and was changed by some Kling or other mispronunciation to "Klêwang" and this story told to account for it. It is about three miles from the Stadt-house.

† This was at Bâchang, near the junction of the Malim and Bâtu Bĕrendam roads, about two miles from the Stadt-house.

But two of them escaped on the way thither, and brought the news here that the enemy with their whole force were at Gevesteyn and intended to come to this place.

Lieutenant POPPALL was ordered at once to operate against them with 80 European soldiers, together with the Bugis garrisoned here, and 200 natives and Chinese.

They marched in the greatest silence to Gevesteyn, where the enemy were supposed to be stationed, but on their arrival at that place, the enemy had fled already (as was their custom) leaving marks of their visit behind, everything in the neighbourhood having been burnt down, destroyed and ruined.

Our troops before returning crossed to the Lazarus-house, hoping to meet the enemy there; but on their arrival found the latter had left this place too and gone to Klêwang. So our troops were obliged to return without having effected their object.

Tuesday, 2nd November.

This morning our Captain STEFANUS ELIAS VAN STEK, leaving the place by Tranquera gate, took the road to the Lazarus-house accompanied by our master-carpenter and eighty European soldiers, together with our Bugis and some natives.

According to the instructions of the Hon'ble the Governor, he was to select a suitable place in that neighbourhood for the construction of a *bentang* to contain a small garrison with some artillery, as a temporary outpost, to put a stop to the marauding parties, which appeared almost daily right opposite Tranquera gate,* continually alarming the inhabitants on that side of the town.

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* This was at a place called "Lindongan," where boats used to lie for shelter: it is now called "Limbongan," and is about two miles from the Stadt-house along the road to Tanjong Kling, and used also to be known as "Baker's Plain." The Hospital was supported by a fund.

They had hardly passed the gate, when they received news that the enemy were marching on the town with their whole force divided into two columns, one taking the road by Gevesteyn, the other the main road direct from the Lazarus-house.

The Captain then thought it better to operate against the enemy with his troops, and force them into an engagement if they stood firm. So he at once detached a column of 40 Europeans with 150 Chinese and Malays, all well-armed, towards Gevesteyn to attack the enemy advancing from that side; while he kept with him the other 40 Europeans with the Bugis of the garrison, 50 in number, and a few natives, to meet the enemy coming along the road from the Lazarus-house.

The party marching towards Gevesteyn met the enemy there, more than 300 strong, at halt on a plain quietly taking their food; upon seeing which they quickly advanced and attacked them with a well directed volley from their muskets. The enemy, not at all on their guard, fled to the neighbouring jungle, picking up a few things as they went, but in such a hurry and confusion, that they left behind a great number of arms, bullets and *sărongs*. Thence they fled to the jungle round the Lazarus-house, where our troops could not follow them so easily, but they found the jungle paths stained all over with blood, certain proof that many of the enemy had been wounded.

Our Captain and his troops arriving near the house of the Jenlif (Tamil) Kisna, discovered the enemy on a large plain opposite the Lazarus-house. When they saw our soldiers drawing near, they fired several rounds, upon which our Captain drew up his troops in order of battle, and returned the compliment with a volley from whole line. Meantime those of the enemy who had been driven from Gevesteyn came forward out of the jungle behind the Lazarus-house and joined their comrades. Our troops from Gevesteyn followed their example.

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*One account says this was so named after a Portuguese man of note; another states that there was a fierce elephant in the neighbourhood at Gâjah Bêrang and hence the name and he would not come any nearer because he saw the place was cleared, "Trangkêra." "Tranquera" means "an obstacle," probably used to denote one of the outworks beyond the fortress. The gate is at the end of Heeren Street, known to the natives as Kampong Blanda, a quarter of a mile or so from the Stadt-house; Tranquera itself extends to a mile or so from the Stadt-house.

Our forces then marched in excellent order, firing continuously at the enemy, who retired as we advanced. When we reached the middle of the plain, those of the enemy who were hidden in the jungle began to fire with their long Mĕnangkâbau guns, which carry a very great distance.

Our Captain then at once ordered the Bûgis and native soldiers with a few Europeans to place themselves on the right and left flanks, and march against the enemy from all quarters. His orders having been obeyed promptly and with precision by the Bûgis and native troops, the Captain himself with 50 Europeans attacked the centre of the enemy. The latter very soon fell into disorder and fled into the jungle, dragging their killed and wounded with them to Klêwang.

Thus ended the first part of this expedition at 11 o'clock in the forenoon, in which engagement we had not one man wounded.

Our Captain, having taken possession of the Lazarus-house thought it better not to stay there too long, because the building stood in the midst of dense jungle, where the enemy could very easily conceal themselves without fear of being discovered, and thence injure our troops very much.

He, therefore, resolved to return with drums beating to his former position and stay there till night. After he had returned thither and taken a rest of about half-an-hour, the enemy reappeared in large parties, dancing and shouting most horribly, trying to intimidate our troops.

Our Captain immediately despatched a mounted messenger to the Hon'ble the Governor to ask him to send two culverins under a strong escort, which he expected would produce a good effect in this case.

Meanwhile the enemy seemed disposed to hold their position at the Lazarus-house, whence they incessantly fired on our troops, and we served them with the same sauce.

Our troops were so enraged with the enemy, that it was almost impossible for the Captain to repeat the tactics he had made use of in the morning, viz., of a simultaneous attack on the flanks and the centre, but the enemy did not long resist, soon taking to flight, and this time in such a hurry, that they had to leave some of their killed behind ; they had many killed and still more wounded. But we too had six wounded in this engagement, three of them Europeans and very seriously, three natives very slightly.

Having thus a second time expelled them from the Lazarus-house, the Captain returned to his former position, where he had that day already twice posted his troops.

The two culverins sent for having arrived and been placed on the sea-shore under cover of some small jungle, so that the enemy could not perceive them, the Captain took the necessary measures and those best suited to receive the enemy in such a manner, should they again return, that they would be satisfied for a long time to come. But it seemed that they were already satisfied, for they did not re-appear ; and the Captain after waiting in vain till 5 o'clock in the afternoon ordered the return march to the Fortress.

Saturday, 27th November.

Some days before we had received news that the enemy, more than 500 strong, having forced their way through the jungle, were again stationed at Fĕringgi* near the Malay temple, and were making a very strong *bentang* there, intending to wait there for the approaching dry monsoon, and the arrival of their allies the Mĕnangkâbaus from Rĕmbau, and then with their combined forces to invade Bunga Râya and Banda Ilir, at the same time attacking the town by a descent of the river on rafts, and so to put into execution the infernal project they had long devised of burning and destroying all the property and massacreing all the inhabitants.

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* This place, about two miles from town on the Dûrian Tunggal road, is said to be so named from the man who first cleared the place (a Portuguese) and who afterwards went to Tampin and made an orchard at Dûrian Feringgi, now one of the frontier boundary points,

The Governor, on receiving this news last night, at once gave orders that this very day a detachment of 60 European soldiers with the Bûgis, numbering 50 men, and a battalion of Chinese and native military should take the field against the enemy.

The marines and sailors of the vessels stationed here, viz., "De drei Henvelen" and the "Waereld" with a corps of volunteers formed the reserve.

These combined forces, numbering about 300 men, commanded by Ensign Kruythoff, lately arrived from Batavia, and Sergeant Meyer, left this town in the greatest silence at half past four this morning, and marched off straight by Panklarame * (Pangkâlan Râma) to Fĕringg Though they had a great deal of trouble on their way thither, the enemy having covered the roads with innumerable caltrops, our troops still reached their destination at half past five.

They were only discovered when at a short distance from the enemy's *bentang* and the latter, warned by their sentries, were up in arms at once, abusing our troops from a distance, and calling out to them to come nearer if they dared.

Our Ensign Kruythoff, knowing this part of the country thoroughly, then detached the marines and sailors with the volunteers and some natives, and despatched them through the jungle to the opposite side of the *bentang*, with the order that they should fire again when they had reached the spot agreed on. The Bûgis and one-half of the European soldiers were stationed in the jungle right in front of the *bentang*, while the rest of the Europeans under Kruythoff himself were stationed at the side of the main road to Malacca. The report of the gun fired by the detached troops was to be the signal for a general attack.

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* "Pangkâlan," landing-place. "Râma" or "Râme" is said to be a corruption of "ramei," populous; the Dutch spelling does suggest that there has been a change in the pronunciation of the word in the lapse of time, but there are other derivations which might be equally plausible, such as the name "Râma" a Hindu name, dating from pre-Mohamedan days. The place is a little over a mile from town on the Dûrian Tunggal road.

The enemy, unaware of these arrangements, continually shouted at our troops, abusing and provoking them as much as they could.

After the lapse of a quarter of an hour we heard the report of the gun, and thus knew that our companions had reached the intended point. The *bentang* was then attacked from three sides at the same time.

The enemy, remaining firmly in their *bentang*, fought as gallantly as ever a native enemy did. We had expected that they would have come to meet us, but they did not this time, and very much disappointed our soldiers, who, exposed to their fire, had to fight against the walls of their *bentang*.

But when our troops had two or three European soldiers killed, they could no longer be restrained; the grenadiers with their hand-grenades stormed the *bentang*, thus taking the lead of the other troops which followed close on their heels.

This created such disorder among the enemy that they decided to break up their centre, and with their amok-runners in front they tried to cut themselves a way through our troops at two corners of the *bentang*.

Our Commander, perceiving their intention, ordered a general charge with the bayonet, in which close engagement the enemy had 40 men killed, and certainly more than double that number wounded, our troops having fought with the greatest irritation.

After burning down their *bentang*, our various forces were re-assembled, and returned to Malacca with drums beating and colours flying, carrying as trophies the heads of those of the enemy whom they had killed, on the points of their bayonets and lances.

We had six men killed, four of whom were soldiers, one a volunteer and one a Chinaman, and not more than 5 men wounded, among the natives and volunteers, and none of them seriously.

MISCELLANEOUS NOTES.

A TIGER HUNT IN JAVA.

(*Extracted from the " Ceylon Observer."*)

THE slaughter which takes place among the cattle of Java, Sumatra and Bali, through tigers, panthers and wild dogs, is greater than is supposed. In remote, thinly populated districts, children (not small ones) and even full grown persons are killed by the royal tiger, and now and then similar cases occur in more inhabited places. Even here, in the neighbourhood of Sinagar (below Soekaboemi, Preanger), a thickly populated and almost entirely cleared district, I have had the sad experience that, in a short time, one can lose much cattle, horses and sheep through wild beasts.

In the first four years of my residence here, before I had become acquainted with the use of tiger poisons, I lost in this manner 14 horses and *karbouws.** Since then also I have not been exempt ; but by employing the poison which I am about to describe the loss of cattle has gradually decreased.

The poison which was employed by me is a yellowish brown powder, obtained from the bark of a climbing plant called *wali kambing,* found in the low marshy regions along the coasts of Java (among others near Tangerang, in the Bantam province and near Wijnkoopsbaai).

In Filet's *Plantkundig Woordenboek voor Nederlandsch Indie* (Leyden, Gualth Kolff, 1876) the plant is referred to under No. 8,705 :—" *Wali kambing* j. *Sarcolobus spanoghei miq.* Nat. ord. of the *Asclepiadeæ ;* loc. Java ; creeper. This plant, with others of the same family, is employed to intoxicate boars, tigers and other animals for fighting; if the animal is not wounded it dies of this poison; but if it receives a wound which draws blood it recovers."

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* Buffaloes.

What the writer means exactly by "to intoxicate for fighting" is not quite clear to me. If one were to use *wali kambing* for a tiger intended for a *rampok*[*] exhibition, the animal would be made quite useless for the purpose, for it would become uneasy, gradually less active, and finally paralysed.

Among the "other plants of the same family" the *Sarcolobus globosus* is apparently also referred to.

As to what FILET says of restoration by bleeding, this statement agrees with what is said in RIGG's *Sundanese Dictionary*, p. 527 (Batavia, LANGE & Co., 1865):—"The root is bruised and mixed up with rice or other food, and placed in the way of wild pigs, which, after eating it, become insensible and torpid; but on bleeding them they recover." [†]

The idea of bleeding wild pigs is more or less strange; but it must be assumed that the operation is to be performed not with lancet or fleam but with *gollok* [‡] or *klewang* [§] and not for any definite surgical purpose.

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[*] "*Rampog.* To spear animals for amusement; a circle of men is formed, each man being armed with a spear, and whenever the animal comes at the ring, he is received on the spears. The native chiefs have exhibitions on their *alun-aluns* of this kind of public amusement. The tiger is the animal practised upon, which is uncaged in the midst for that purpose."—RIGG'S *Sundanese Dict.*

[†] We give the context of the extract at follows:—"*Wali-kambing.*—Name of the liane growing along some parts of the low coasts of Java. It is found, amongst other places, near the coast from the mouth of the Chidani towards Bantam. The root is bruised and mixed up with boiled rice or other food and placed in the way of wild pigs, which, after eating it, become insensible and torpid, but on bleeding them they recover. It is called *Péler kambing* about Batavia. Wali, C. [CLOUGH'S Sinhalese Dictionary] 628, wild, living in the wood. 'The fruit of a species of Contorta called *Kalak-kambing*, has a deadly effect on tigers. It is prepared by the admixture of other vegetables, and exposed on a piece of rag at the places frequented by them. In some districts their number has been sensibly diminished by this poison.' Horsfield. Raffles' Java, vol. 1, p. 347. It would thus appear that a vegetable preparation known by somewhat different names, but all terminating in *kambing*, goat or sheep, has a deleterious effect upon wild animals and is in different parts of Java used for the purpose of stupefying wild beasts."

[‡] Cutlass. [Chopper.—*Ed.*]

[§] Sword.

The statement of Mr. Rigg, that "the root is bruised," is less exact. Although poisonous properties are found in the whole plant, the substance which is used for poisoning is obtained from the innermost bark of the stem. The fine outermost bark is first scraped away: even that of the smallest twigs can used. The *wali kambing* is a plant with whiteish stem and leaves of the same colour. It is said that the fruits can be eaten with impunity. They taste like unripe papaya and have a peculiar shape, from which the *wali kambing* borrows another name. This name, however, for decency's sake, I shall not give.

It may be true that poisoned animals recover by the drawing of blood, but I can neither confirm nor contradict the statement, nor can I give any information as to the effect of the poison under notice on pigs.

It still requires much trouble and expense to obtain good *wali kambing* here, so that I have used the poison only for tigers and wild dogs.

A bitch of an European cross, in pup, was poisoned a couple of years ago, at Ardjasairi, through having partaken only too freely of the carcase of a buffalo prepared for tigers. The dog vomited much, became gradually paralysed, and remained lying three or four days stiff and as if lifeless; it then recovered slowly, and in due course brought into the world half-a-dozen healthy pups, which did not suffer in any way.

I imagine, therefore, though I cannot say it with certainty, that in some cases, when the tiger has not swallowed much of the poison, it may recover from the effects. I know of cases, however, where without doubt poisoned flesh was eaten by a tiger, and yet no trace was to be found of the patient.

In the *Maandblad voor Natuurwetenschappen*, 8th year, No. 3, is a paper by Mr. Boscha Jzn., Phil. Nat. Cand., "On the Poisonous constituent of *Sarcolobus spanoghei miq.*"

The writer therein details the method and the result of his chemical investigation of a quantity of *wali kambing* sent to him for that purpose by me, and sums up his opinion as follows:—"I consider, from the corresponding indications of the physiological effect, the smell, and the chemical reactions, that I can pronounce with perfect certainty the poisonous matter of the *Sarcolobus spanoghei* to be coniïne."

Coniïne is the alkaloid to which is ascribed the poisonous nature of the hemlock or *Conium maculatum*—the plant, with the juice of which, according to historical tradition, SOCRATES was put to death.

In the *Natuurkundig Tijdschrift voor Nederl. Indie,* part 15, p. 478, also will probably appear a report on the value and effect of the *wali kambing.* I regret that I cannot here make use of that aper, the more so as it is from the hands of our able chemist and quinologist BERNELOT MOENS and his now deceased brother.

It is known to the people in the neighbourhood here that, as soon as a head of a cattle has been carried off by a tiger, information is at once to be conveyed to me of the fact. I then send persons who are accustomed to make their way through jungle and waste, well armed, to the place where the slaughter has taken place, and the carcase is by them strewn over with poison (for a buffalo a beer glass three-fourths filled is sufficient; for a sheep or goat much less is needed); they are armed, because the tiger is sometimes found to come back again to his prey very quickly. My brother at Ardjasiri went himself two years ago to poison a sheep which had the previous night been taken by a royal tiger out of the fold in the middle of the factory *kampong*, and carried away close to his house through the middle of his vegetable garden. (*N. B.*—The door of the fold, made of plaited bamboo, to which the sheep had been fastened, was dragged by the tiger for some distance.) In the course of the day it was discovered where the tiger had concealed the sheep. Then my brother, at about 5 in the afternoon, forced his way through the high *glagah* * to the place where the sheep lay, he found the tiger already there, which was busy preparing to carry the sheep further into the interior.

The thick cane brake rendered impossible a good shot at the beast of prey, which with amazing springs escaped from the bullet intended for it. The sheep was thereupon carefully prepared,

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*The grass *saccharum spontaneum*.

and the following morning at 6 o'clock no trace of it was to be found except a few bloody flocks of wool. Although the whole neighbourhood was up to 2 o'clock the same day thoroughly searched and traced, neither then nor afterwards was anything seen of the tiger.

To prepare the carcase properly, long cuts are made in the fleshiest parts, which are closed again after *wali kambing* has been strewn in them. Of a buffalo, the neck, loins, groin and thighs are the parts most liked by the tiger. The ears also are usually found eaten off.

From the condition in which buffaloes and horses killed by tigers are found, it is to be inferred that horses, colts and young buffaloes are seized sideways or from in front, after which the throat is bitten through. The tiger seizes full-grown horned buffaloes generally by one of the legs, which must then, on account of the desperate efforts of the victim to release itself, be held fast with terrible strength. Skin and flesh are often found under the claws of the tiger, cut in a circular form from the leg. With a stroke of the claw in the groin of the buffalo the belly of the strong beast is torn open, and then, defenceless from pain and loss of blood, it is dispatched. Wild dogs also hunt and seize cattle from behind. On cows which have managed to escape from a troop of wild dogs, I have seen the traces of the fearful bites of these beasts, whole pieces of the flesh being torn from the hinder part of the belly.

A carcase which has been already eaten from during one night or even three, and which then swarms with maggots, is still suitable for poisoning, as the tiger (as also dogs even) is not unwilling to have his game in the condition I found set forth in a French work on pheasants:—" Pour manger un bon faisan, il faut qu'il change de place tout seul."

After having seasoned the titbit, the surrounding population must be warned to keep their dogs fast tied up, or they would otherwise feast themselves on what was not meant for them. On the following day early in the morning, it must be ascertained by means of persons sent whether any of the carcase has been eaten, and an endeavour must also be made to prevent many people coming to have a peep at the carcase ; as though the tiger is not specially timid at night, I have known of cases where, on account of the traces of numerous visitors during the day, the tiger has found it unadvisable to return at night.

With properly armed and trained hunters, and also with dogs, one can trace, when some of the bait has been eaten, the direction taken by the tiger, but this is often difficult and sometimes fruitless.

The almost entirely inaccessible and densely overgrown spot which the tiger choses for his "*kraton*"* makes it extremely fatiguing for Europeans to track him ; but, hard though it be, it is a possibility to find a poisoned tiger ; to track a healthy tiger is, in my opinion, except by a stroke of good luck, a hopeless task.

The well-known tiger hunts of the English in Bengal are mostly carried out in an entirely different kind of country. There are, as a rule, extensive plains with comparatively moderate undulations. The *jungles* (thick canebrake and scrub) and the *nullahs* (small ravines, in which a rivulet or brook meanders and which are sometimes also overgrown) offer little hindrance to the hunter, who places himself, with some good weapons, some bottles of soda-water, and the invariable "cheroots" in a so-called *howdah* on the back of the elephant, with a *mahout* to guide the animal. The fearless, sharp-sighted elephants do duty as beaters, and so the tigers, roused by a long row of elephants and huntsmen, are shot down from above from the moving *panggung*.†

Even if we had here trained elephants, they would be useless in Java (except on occasional plains here and there), and especially so in the steep thickly wooded ravines of the greater part of the Preanger.

After prolonged drought, tracking is naturally more difficult than in wet weather, when the ground shows the trace of the game more plainly. If it is not found plentifully near the carcase, an attempt must be made to "cut the track," that is search in a wide circle round the place where the game has been and across his track.

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* Palace.

† Elevated stage, platform, watch-tower.

If one has good dogs, which are by no means to be had everywhere, they may be utilised (only not close to the tempting smell of the bait). The dogs will probably not attack the tiger, they will generally not dare to go far from the hunter, but they will point out the presence of the game to him if he is acquainted with their habits.

If one is on the right track, vomited flesh and other strongly smelling tokens of the tiger's sickness are found. Sometimes the patient is found dead; sometimes, two days after the eating of the poisoned flesh, still quite ready for the fight. Sometimes also healthy tigers are found keeping company with the sick one; and it is therefore necessary always to exercise the greatest caution. If one comes upon steep declivities caution is still more needful, for the radius of a tiger's spring in a downward direction is much greater than on a flat or in an upward direction.

I once tried to shoot a tiger-panther which was lying above me against a steep declivity, through the head. The bullet went through his ear, and with a spring and a terrific snarl the raging beast stood crouched at my feet. Only by the good help of a troop of dogs did I escape from the claws of the *wali-kambing-ed toetoel.* *

Already, since the beginning of 1863, forty head of royal tigers and panthers and a large number of wild dogs have thus been destroyed by me and my hunters: and by my brother at Ardjasari near Bandoeng, whom I had provided with *wali kambing*, two panthers and six royal tigers.

In 1875, my brother at Ardjasari sent a descriptive narrative of a tiger hunt to his absent wife.

Although this account was not written for public perusal, it seemed to me so suited to be appended in a supplement to my paper intended for your journal, as a rather more highly coloured illustration than that paper is, that I sought and obtained the permission of the writer to do so.

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* "*Tutul.*—Spotted, marked with spots or *blotches. Maung tutul,* the spotted tiger, a panther."—RIGG'S *S. D.*

The portion of the letter referred to is as follows :—

" You remember the tract of land which is still wholly uninhabited above our plantation, a little below the edge of the forest that covers the Malabar ; where we breakfasted a couple of years ago with our guests H. and C. under a clump of bamboos, which served as a tent from the sun ? Early in the morning it looked somewhat less sunny and gay than when we made a little fire to boil the water for our coffee ; when seats were placed in a circle round a camp table, and the ladies of our company unpacked boxes rich in promise : and when there was such merry chat and laughter, whilst all eyes feasted themselves on the prospect over the sunny expanse of Bandjaran.

" In the early morning of 2nd February, 1875, it was wet and cold, it had rained the whole night, and thick clouds, from which still fell steadily a fine chill drizzle, hung gray and chill and heavy over the erstwhile charming landscape.

" On an open patch between the belts lay a dead *karbouw*, fearfully torn and mangled, and a group of thirty living buffaloes stood in melancholy, pensive attitude. What was going on in the buffalo-heads could be gathered by the glance of an eye. The silent beasts were thinking of their deadly enemy, the tiger, who the night before had fallen upon and killed one of their brethren, and who had come back that night to feast on his prey. An old, melancholy, staring buffalo cow, perhaps mother or aunt of the one so cruelly slain, sniffled in Buffalese to the bull standing nearest to her : 'Hodie mihi, cras tibi !' and the bull shook his terrible horns angrily, as if he would say : 'I would that he would try conclusions with me for once !'

" But see! there comes more life in the misty sombre landscape. Horses are heard splashing through a stream (you know the stream into which H. let his shoes fall when he was wading barefoot through the water, so as not to spoil the patent leather), and out of the fog a hunting train appears : in front is the *djoera-*

gan [*] Ardjasari, whom you know, armed with his heavy Forsyth gun, called by the natives '*si mariam*' (the cannon); following him the '*djoeragan gamboeng*' with a clean-shooting central-fire smooth-bore hunting-piece, then several *mandoers*, [†] SETRA, ALSAH, ALIMON, HASSIM, &c., with less choice firearms, among which are seen some with the barrel bound to the butt and stock with rattan; lastly, ASPAN our cowkeeper, armed with a lance. The horses of the two first-named were led by hand in the rear by a pair of stable-boys.

" The 'file' now appears to become aware of the murder of the buffalo; it mounts and descends, seeks its way through the belts, and at length reaches the place where the murdered *karbouw* lies. The brothers and friends of the slain go respectfully to one side.

" From another direction other men appear; they are descendants of the followers of Confucius, THIO TEN DJOELONG and his son, both with guns, besides the owner of the massacred beast with a number of the inhabitants of the *babakan* [‡] Tji-Enggang bearing no other weapons but the inseparable *gollok*.

" All the men examine the dead buffalo earnestly and carefully, and find to their satisfaction that the tiger, in spite of the rainy weather, has eaten greedily of his prey, which, by order, of *djoeragan* Ardjasari, had the previous evening been well spiced, not with *moutarde de maille*, or with Worcester sauce, but with (you know) the fearful *wali kambing*. After some consultation, a commencement was made with the difficult, to us at first apparently almost hopeless, task of tracking the murderer on this sodden grass-grown tract. They do indeed find, at a distance of a couple of paces, vomited blood and mucus, but nothing besides this is to be found on the ground, which has been washed thoroughly during the night. Several *kampong* dogs which have been brought soon show themselves, as nearly always is the case, to be not worth their salt; they run unconcernedly, after their masters, and soon everyone is convinced that if they were not tied fast they would in a trice give themselves a frightful indigestion with the remains of the tiger table.

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[*] " *Juragan.*—A headman or leader in any way. A petty district Chief, the Chief native or Headman on the private estates, who has charge of the police. A headman in a boat. Compounded of *Juru*, an overseer, one who presides over or acts in any department of business, and *Ageng*, Chief, though in the compound word the final *g* is hardly ever heard."— RIGG'S *S. D.*

[†] " *Mandor.*—A native headman, a village chief. A foreman over work It is the Portuguese *Mandhore*, to command."— RIGG'S *S. D.*

[‡] " *Babakan.*—A sub-village; a village whose inhabitants have originally come off as a colony from some other village, as it were peeled off, as we might say swarmed when speaking of bees."—RIGG'S *S. D.*

" The 14 hunters now disperse to examine the tract patiently and carefully in all directions. One of the natives has had the luck to see imprinted on an overgrown spot the footprint of the tiger; he goes in the direction towards which the claw points, finding now and then an unsavory indication, and at length stops at the edge of the densely overgrown steep ravine of the *kali* * Tji Enggang, on a place where the tiger appears to have lain awhile, and where he must have felt very unwell, as evidently appears from a great mass of vomited flesh. Hurrah! hurrah! the trace is found. The scattered company is called together; two of the most experienced trackers are sent on in front; *Djoeragan* A. S. follows; his son pushes near to him through the brushwood that covers the steep slippery declivity of the ravine, in order to press his father once more fervently to his breast: ' that in God's name he would be cautious! ' the cocks of the guns are heard uttering a threatening ' tick-tack ' as they are pulled up, and the long row goes forward descending slopingly along the edge of the ravine (in a southern direction or up-stream), led by the two trackers, who now and then receive an admonition not to be over-hasty and rather to wait a little when they might be in doubt.

" With the exception of several high but widely scattered trees, this tract was covered with various kinds of brushwood, different varieties of bamboo, and in many places thick with *Honjeh* † and

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* A brook, river.

† "*Honjé.*—A scitameneous plant, formerly called Geanthus speciosus, but nowadays called Elettaria. The fruit grows on a stalk by itself and forms a large round collection of nuts or pulpy seeds. Used by the mountaineers in cooking in place of Tamarind for the sake of its acidulous properties."—RIGG'S *S. D.*

Tepoes * (varieties of Elettaria), among which the *alang-alang* and other grasses were mostly choked; it was therefore certainly thickly shaded, but as a rule one could see to a distance of 10 to 15 paces of himself, with the exception of rougher spots, everywhere intervening, woven throughout with various creepers. The best of this tract for our hunt consisted in this, that the tiger's tracks were easier to find here in the soft clay and rotting layer of leaves than above on the buffalo pasture. Here and there the *golloks* had to be taken in hand to clear a passage for us. Steepness, slipperiness and foot-entangling roots here gave the most trouble. Now and then the leaders lost the trace and all had to come up and look right and left for the right trace again. The tiger had taken a peculiar road: first southwards up-stream; next straight down towards the *kali*, apparently to drink; after that again northwards down-stream. With stubborn patience the *file indienne* of hunters followed through the dripping branches, until, after an hour and a half we saw footprints so fresh that, the particles of earth seemed not yet to have settled down; we also again found vomited flesh, etc., so that we had the certainty, that the right trace was not lost (among other tiger tracks).

" We had forced our way through a patch somewhat overgrown with *glagah*, when the foremost man had suddenly stood still imagining he heard rustling through the foliage; here the trace unexpecteddly diverged somewhat to the right; the file of the hunters was somewhat broken in the search for the new trace, R. and the *mandoers* and other natives with him formed a sort of right-wing; ASPAN the cowherd and *Baba* DJOELONG went in front; I was No. 3 of the file. *Baba* was a pace or so in front of me, when I saw him lift his gun. The report of the explosion in the thick jungle mingled with the fierce and to us delightful roar of the tiger found at last. I spring hastily forward, catch a glimpse through the bushes of part of the back and shoulder of the enemy creeping up towards an eminence, black cross-stripes on a yellowish ground—and the deep voice of '*si mariam.*'

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* *Tepus.*—A scitameneous plant, Geanthus coccineus."—RIGG'S *S. D.*

(96 grains of powder per ball) is heard twice, accompanied by the renewed roar of the tiger.

" Whilst I am busy putting a couple of fresh cartridges in my breech-loader, fire bursts from the right wing, led by R., who meanwhile has executed a flank movement on the enemy. Moving forward a few steps, I then managed to see the whole of the tiger, who is already lying on his back, but still motioning menacingly. All ten shots had struck, and fearful that the rug which I had promised you for your bedroom would be riddled like a sieve I ordered a cessation of fire and approached the tiger within about 12 paces. He was still living, showed me his formidable teeth, and contracted his claws convulsively. By general request I thereupon sent a 'settler' through the enemy's head, who at once sank back powerless, whilst the contracted claws were immediately relaxed.

" Then the natives raised a mad cry of delight. They yelled and fired salvoes of joy as long as they had powder; and whilst R. and I, seated on the decaying trunk of a tree overgrown with moss and ferns, smoked our cigarettes and divided our supply of tobacco amongst all our comrades of the chase, litter-poles of bamboo were cut and a rough sort of rope made from split rattan.

" We confessed to each other (R. and J.), that this result of the hunt far exceeded our expectation; for when in the morning we got on our horses in the rain and rode up more or less numbed, with the prospect of all traces being washed away, the hope was certainly very small.

" In descending the mountain we marched, with the tiger carried by four men in front, in the manner of a triumphal procession through the Tji Enggang *kampoeng*, where lives the owner of the herd of *karbouws*, so many of which had been eaten up by tigers (you know that a week or so ago one of our buffaloes also, which was bought for *f* 52, shared the fate).

" Wasn't there joy in Tji-Enggang!

"As we neared home, a corps of nine or ten *angklong*[*] players met us, for the winged rumor had already preceded us and to the playing of *angklongs* a circuit of the factory was made, at which the natives became fearfully excited.

"You are sure to remember that mad *gegil*[†] of that time when I came to the house with a *toetoel* which had stolen a calf from us.

"When the tiger was laid in our front verandah between the two middle columns, the court was black with men. Good presents were made to all the hunters and trackers, and the *angklong* players also were not forgotton.

"This is the history of the rug which is to lie in your bedroom.

(Sd.) R. A. KERKHOVEN.

"Ardjasari, 2nd Feb., 1875."

I hope that the above particulars, while they may be thought worthy of a mission to the *Tijdschrift van Nijv. en Landbouw,* will convince the readers that for anyone who has the time and strength to devote to it, the *wali kambing* is an excellent means for getting rid of a number of tigers.

E. J. KERKHOVEN.

Sinagar, 9th July, 1875.

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[*] "*Angklong.*—A musical instrument made of bambus, cut off at the ends like the pipes of an organ, and being strung together on a frame, are shook to elicit their tones."—RIGG'S *S. D.*

[†] Noise, *tamasha.*

LANDING OF RAFFLES AT SINGAPORE.

In No. 10 of the Journal of the Straits Branch of the Royal Asiatic Society, page 285, is an interesting account of the "Landing of RAFFLES at Singapore, by an Eye-Witness."* So long as WA HAKIM, the name given to this venerable deponent, keeps to what he saw, his narrative appears to be strictly correct; but other details are so evidently contrary to what would have taken place, that I venture to question their accuracy. For instance, he says:—"Batin SAPI, an Orang laut, went to bring Tunku LONG from Bulang. "I think he was away four days. Batin SAPI came back first, and "then Tunku LONG came."

Now, it is very unlikely that Sir STAMFORD RAFFLES, who had some knowledge and experience in Malay etiquette, would send a single "Orang laut" to summon to his presence a Prince of the Royal Blood, whom he intended to make Sultan of Johor, in order to obtain a proper cession of Singapore, and considering it a pity to allow such an erroneous statement pass to posterity as history, I have made enquiries from the best authorities, and find that two Anak Raja, namely, Raja OMBONG and Inche WAN ABDULLAH, were the persons entrusted with the mission, and they brought Tunku LONG here, having found him fishing in the Straits of Rhio. These Anak Raja received each $500 for their trouble. My chief informant has been Mr. C. F. KEUN, who derived his information from Tunku PURBA, wife of Sultan HUSSEIN; from Raja PRANG, brother of Raja OMBONG, and from Tunku DAGANG: and the account seems generally accepted by the Malays as correct. It is also, I believe, confirmed by Munshi ABDULLAH in his "Hikayat," but I cannot, at present, refer to the book.

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*[With reference to this "Note," it may be as well to give the letter with which the previous "Note" was forwarded for Journal No. 10, which is here referred to:—

"All the accounts I have got hold of in H.'s extensive library are contra- "dictory. Thus in 'Sir Stamford Raffles' Life by his Widow' no definite "account is given of his landing, but it says that the account as given by CRAW- "FURD in the "Embassy to Siam" is wrong. In the first number of the prede- "cessor of the Straits Asiatic Society's Journal, dated 1875, another account is "given; and then there is the 'Hikâiat Abdullah' which differs from all. So "that really I think old WA HAKIM'S account is useful. I have put it in a "condensed form." ED.]

The idea of a Batin being sent on such a mission will make Malays, or those acquainted with their manners and customs, smile; but it is very possible that Batin SAPI accompanied the "noblemen" mentioned above.

W. H. R.

LATAH.

I have received several communications from different quarters upon the subject of my recent paper on *Latah*. On one point, my correspondents seem to be agreed, viz., that the omission of Chinese from the list of residents in the Straits who are afflicted with *Latah*, is due to my defective observation.

It would shew great presumption were I to say definitely that those who have favoured me with their criticism are wrong in their opinion; but it would be equally false humility on my part to admit its correctness, upon the data which lie before me.

In no case have any reasons been given for the assumption that I am in error; nor are any particularised instances referred to by which such error might be corrected or modified.

And I may add, with candour, but I trust without offence, that many of my recent correspondents have had neither length of time, nor favourable opportunities, in Malaya, sufficient to warrant the formation of their very definitely expressed opinions.

I am told by all who have written to me that numbers of Chinese in the Straits are imitative *Latahs*. I am indeed told by one writer that such cases are "numberless."

It could hardly have escaped my notice that there are many Chinese in this country who imitate the words and jestures of others. But this is true of many people in all countries.

It is true of some monkeys * and of a large proportion of vulgar children. †

But I repeat that, after careful observation, I have not met with any Chinaman in the Straits whom I should describe as *Latah.*

My remarks upon this section of my former paper were, no doubt, crude and unsatisfactory. But I remember saying that this division of *Latah* subjects must not be roughly described as "village idiots."

Now, I should baldly describe all the Chinese in whom I have noticed this propensity as distinctly microcephalic.

In two very marked cases which have come under my notice in the last three years, and which, for some time, perplexed me in this very connection, one patient has died insane in the charge of his friends in Penang, and the other is now an inmate of the Lunatic Asylum in Singapore. I can say, with confidence, that these two are the only instances I have met in which I have had any doubt as to the absence of *Latah* amongst the Chinese.

That this imitative propensity is common both as the precursor and the accompaniment of certain forms of mental disorder, is well known.

"In certain morbid states of the brain," says Dr. BATEMAN in his work on Aphasia,‡ "this tendency is exaggerated to an extraordinary degree: some hemiplegic patients and others, at the commencement of inflammatory softening of the brain, *unconsciously* § imitate every word which is uttered, whether in their own or a foreign language, and every gesture or action which is performed near them."||

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* Noticeably Cercopithecus.

† Those who read my former paper will be prepared to hear that I deny the existence of *Latah* before pubescence, while I admit, as an inexplicable fact, that, where present, it is persistent in both sexes long after the powers of reproduction are extinct, and, in the case of women, as a rule, ends only with life itself.

‡ Ed. 1870, p. 110.

§ There is no unconsciousness, mesmeric or idiotic, in the actions of a *Latah.*

|| Similarly *vide* VOGT's "Mémoire sur les Microcépales" *passim,* especially p. 169, Ed. 1867.

I cannot speak from experience of the ultimate fate of any *Latah* of the imitative class. But I can say confidently that the exhibition of this peculiarity is unaccompanied by any other mental irregularity, except those which I have attempted to describe as pertaining to *Latah*. And in those cases which I have had the opportunity of observing for any length of time, I have satisfied myself that the malady is not progressive.

Further, I have seen many oldish men thus *Latah* who, according to the testimony of their elders, have been so afflicted from the age of puberty.

And lastly, I have never heard an "orang latah" called an "orang gila." Nor have I ever heard any man say of one so diseased, "He will become mad," or "He will die."

For these and other reasons, apart from my own theory on the subject, I am led to believe that this propensity in *Latahs* is an anomaly, distinct from a not uncommon mental disease in other parts of the world, to which it bears some superficial resemblance.

And, until proof is given to the contrary, I rest content with my belief that the peculiarity is one in which the Chinese have no share.

It must be, at all times, dangerous for the unscientific to argue from apparent similarities, the causes of which must be hidden from them.

As I have written as a non-scientist, I must add that I am quite alive to the parallel danger I am running in pointing out differences which stand merely upon the basis of my own unlearned and limited observation.

What *Latah* really is, it remains for some future pathologist to say.

But until "the man has spoken with authority," I trust that no half formed and rash generalization will be suffered to class the imitative Malay with the microcephalic idiot: our snake seer with the victim of alcohol; the rarely found Malay girl-sufferer with the ordinary nympho-maniac; in a word, the unexplained *Latah* with the *Lunatic*, whose mental disorders have now formed the subject of the specialist's investigations for several generations.

H. A. O'BRIEN.

NEW MOUNTAIN SEEN IN PERAK.

On a spur of the Gûnong Bubu Range, which lies a short distance inland from the coast of Pêrak, in Latitude 4° 35′ N. and Longitude 100° 50′ E., the Government of Pêrak has opened an experimental plantation at an elevation of 3,200 feet on a hill named Gûnong Ârang Para. The bungalow on this hill is named "The Hermitage," and from that spot I saw, on the morning of the 15th instant, a very lofty mountain, not previously discerned from this point, though a European (Mr. Bozzolo) has been living on the hill for more than 18 months.

On the night of the 14th there was a thunderstorm with heavy rain, and when the morning of the 15th broke, the mountain ranges could be seen to an immense distance with great clearness.

Looking in an easterly direction across the valley of the Pêrak River towards the succession of ranges, which must lie near the junction of Pêrak, Kĕlantan and Pahang, I noticed what appeared to be a lofty mountain with a filmy cloud on its southern slope.

Mr. Bozzolo, who was with me, thought there was no mountain, only a cloud, but fortunately we had a powerful telescope and binoculars and with their assistance an exceedingly lofty mountain was distinctly visible at a distance that I guess to have been about sixty miles. I immediately took the bearing of this mountain and found it to be 102°, *i.e.*, about 12° South of East. The mountain has a wide uneven top with steep sides, which rose from a thick bank of white cloud and through this cloud appeared three or four black spots, evidently the rocky points of another lower and nearer mountain or range, while the cloud shewed there was a great distance between them and the more distant and far more lofty mountain which first attracted my attention.

At a rough guess, this mountain looked to me as if it might be 11,000 feet or 12,000 feet high, perhaps even more, for within a radius of 25 miles there were many peaks between 6,000 feet and 7,000 feet to judge by.

Within a very few minutes of first sighting the mountain it was no longer visible, and even the cloud seemed to have merged in the haze of the horizon, making it difficult to believe that we had really seen there a far more imposing height than any I have yet beheld in the Peninsula.

All the other peaks and ranges were still wonderfully clear and I immediately made a sketch of all I could see from the Plus Valley to the limit of vision in the South.

Thinking this sketch would interest the Straits Asiatic Society, I have had a tracing made which I now enclose.*

The tracing is not so successful as I had hoped it might be, but still it gives an idea of the mountain ranges as I saw them, and I trust I may yet be able to furnish you with some further and better information regarding this considerable mountain which lies in the direction of the mountain marked on the Asiatic Society's map as Gûnong Tahan, though that would appear to be more than 100 miles distant from Gûnong Bubu.

The point in that range called on the Society's map "Bukit Chai" is about the position of Gûnong Ârang Para.

The outline of the range which divides the Pêrak from the Kinta River (the highest point of which is Gûnong Mêru) has been made, in the tracing I enclose, rather darker than that of the more distant ranges.

The highest ground between the Plus and Kinta valleys is not more than 300 feet, and this is imperceptible from "The Hermitage," so that the Kinta valley appears to come round the back of the Mêru range into the Plus valley.

The range of hills which divides the head waters of those rivers which drain into the Plus valley, and ultimately into the Pêrak River, is not very distant from the East Coast of the Peninsula and an officer of this Government (Mr. CAULFIELD), who did not get nearly to the sources of these rivers, told me he had seen the waters of the China Sea from the point he *did* reach, this feeder of the Pêrak River stretching far to the West and North, and taking its rise in a very lofty range of mountains well within sight of the East Coast of the Malay Peninsula.

F. A. S.

Kuâla Kangsa,
21*st April*, 1884.

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* To be seen in the Library. [ED.]

[Mr. McCarthy, a Surveyor who accompanied a Siamese Commissioner, in August last, to meet the Resident of Perak near the frontier of Patani where it borders on Ulu Perak, ascended a mountain called Gunong Hangus close to the border. "It is about 4,200 "feet high and presented no considerable difficulties in the ascent. "He got an excellent set of angles including Gunong Inas and "the high peak of Patani *and also saw a mountain of very great "elevation to the Eastward of South, fifty or sixty miles off.* This "is probably the one mentioned by Deane as more than 13,000 "feet high, which is supposed to be in Pahang behind the Ulu "Bernam." Sir Hugh Low's Journal, Aug. 23rd, 1883.

W. E. M.]

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